

JSS MAHAVIDYAPEETHA

JSS ACADEMY OF TECHNICAL EDUCATION, BENGALURU - 60

Affiliated to Visvesvaraya Technological University, Belagavi, Karnataka, INDIA

Approved by All India Council for Technical Education, New Delhi

UG programs accredited by NBA: ECE, CSE, ISE, CIVIL, ME, E & IE



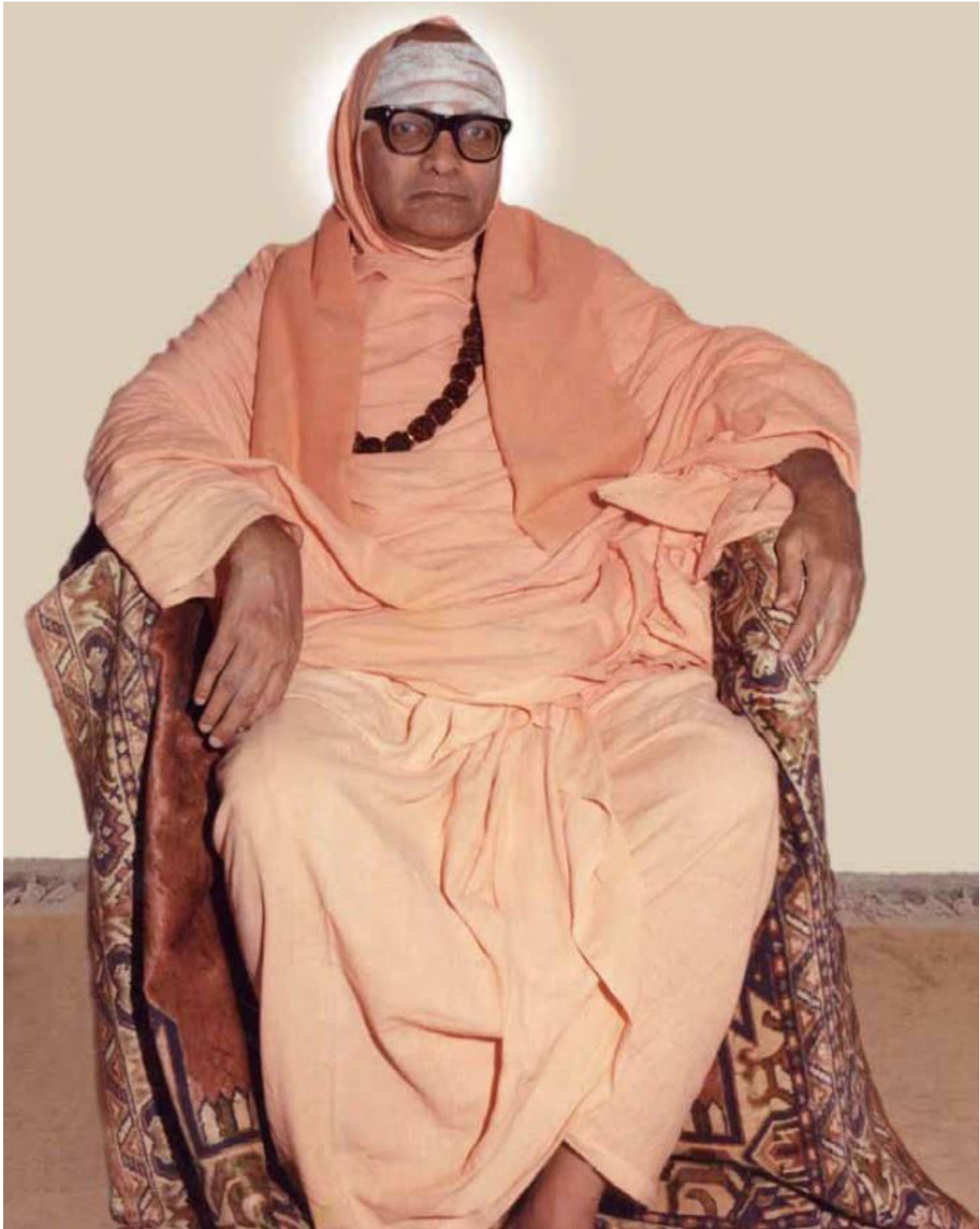
ANNUAL REPORT

2021-22



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Founder President of JSS Mahavidyapeetha



His Holiness Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamiji

His Holiness Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamiji, the 23rd Pontiff of Sri Jagadguru Veerasimhasana Mahasamsthana Math, known as Sri Suttur Math, inherited the legacy of the 10 century old Srimath at an early age. He was born in 1916 and ascended the Peetha in 1928 when he

was hardly twelve. He shared the responsibilities with his senior, Jagadguru Pattada Shivarathri Mahaswamigalu. Ever since he had been at the helm of affairs of the Math for more than half a century. Every step he took forward was in search of new areas of service.

He was a patron of arts and literature and a scholar in Kannada and Sanskrit. He sacrificed his educational career to provide succour to the helpless poor. The burning desire to assuage the educational needs of hundreds rural children, he started the first free hostel at Mysore in 1941. Thus began his journey of socio- economic transformation of the region with the establishment of Schools, Colleges and Sanskrit Patashalas in and around Mysore . A single minded dedication to a task aimed at the welfare of all alone goaded him to trudge a path of sacrifice. The incredible divine grace coupled with intense and sustained focus resulted in materialisation of his great dreams of establishing free schools and hostels, professional colleges, centres of art, music, and literature etc.,. Jagadguru Dr. Sri Shivarathri Rajendra Swamiji had a strong vision of starting educational institutions in rural areas considering the hardship of students coming to cities seeking education. In order to make this possible, he started the Jagadguru Sri Shivarathreeshwara Mahavidyapeetha in 1954, later it was registered under the Societies' Registration Act in 1962. Under the untiring efforts of Dr. Sri Shivarathri Rajendra Mahaswamiji, the Vidyapeetha has witnessed enormous growth in the field of education. Thousands of children, men and women found solace under his boundless compassion.

Though the earthly sojourn of His Holiness came to end in 1986, his indomitable spirit lingers through over 350 institutions across the continents. The centenary birth anniversary of Jagadguru Dr. Shivarathri Rajendra Mahaswamiji was celebrated in 2015 by the devotees all over the world as a token of expressing the respect and gratitude to the ever-loving spirit of this Noble Saint and by following his principle of `work is worship`.



His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji

His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji, the present pontiff and the 24th Peethadhyaksha of Sri Jagadguru Veerasimhasana Suttur Math, assumed the Peetha in 1986 at the young age of 29 years. He had his spiritual training under the guidance of his illustrious predecessor His Holiness Jagadguru Dr Sri Shivarathri Rajendra Mahaswamiji the founder president of the JSS Mahavidyapeetha, an educational and cultural organization dedicated to the ideal of providing education to the villages of Karnataka.

His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji, the Honourable Chancellor of JSS Academy of Higher Education & Research - a visionary, endeavoured not only to cross the Vindhyas and establish engineering colleges, schools, etc at NOIDA (UP) and the JSS Spiritual and Cultural Centre at New Delhi but also travelled beyond the shores of the country and established the presence of the Math in USA, Mauritius and Dubai. His efforts to reach out to the core of the problems that challenge our society be it literacy, health care, employment or building values amongst the society is lauded and recognised by one and all. It is His Vision that has taken the Deemed university to achieve significant milestones in a short span of ten years and be recognised as one of the most progressive universities in the field of Health Sciences.

About JSS Mahavidyapeetha



The origin of JSS Mahavidyapeetha (JSSMVP), a formidable educational movement, can be traced to the establishment of a small hostel in 1928 to cater to the accommodation needs of students pursuing higher studies in Mysore. His Holiness JagadguruDr. Sri Shivarathri Rajendra Mahaswamiji established the Jagadguru Sri Shivarathreeshwara Mahavidyapeetha (JSSMVP) in 1954 and it was registered under the Societies' Registration Act 1960. Focusing on a purpose as expansive and yet as specific as improving quality of life through Human Development, the JSS Mahavidyapeetha has grown from strength to strength. A long and healthy life, Education for all and a decent standard of living, the indicators of Human development, have been the underlying philosophy of Jagadguru Sri Veerasimhasana Mahasamsthana Math, Suttur Sriksheethra, for centuries. This is also the philosophy for which the Mahavidyapeetha today stands for. Under the untiring efforts of Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamiji, the Mahavidyapeetha has witnessed enormous growth in the field of education and today has over 300 institutions under its fold, from kindergartens to postgraduate centres and postdoctoral research catering to the educational needs of more than 1,00,000 students.

The Mahavidyapeetha continues to play an important role in expanding the scope of its activities to several branches of knowledge, welfare and culture. Its educational efforts span crèches for toddlers of working rural women, schools to impart primary and secondary education in both Kannada and English medium, Colleges, Polytechnics, Technical, Medicine, etc. For realizing its mission, it has equipped itself with an extensive infrastructure and an army of dedicated and highly qualified human resource. These institutions, located in strategic areas, serve a broad spectrum of society, from virtually remote tribal villages to metropolitan cities such as Bengaluru, Noida, New Delhi, Ooty, and Coimbatore, besides their presence in United States, Mauritius and Dubai.

Apart from formal education, the initiatives stretch to integrated rural development through training and empowering of rural folk, reaching out healthcare to people through modern and traditional Indian systems of medicine, patronizing literary activities, visual arts, performing arts, restoration of temples and historical monuments.

About JSS Academy of Technical Education, Bengaluru

JSS Academy of Technical Education (JSSATE) was established in the year 1997 at Bangalore and is under the umbrella of JSS Mahavidyapeetha, Mysore. JSSATE is the result of the vision of our President, His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji to proactively participate in establishing a world class Institution for Technical Education. The Campus is located on a sprawling 21.17 acres land surrounded by lush green plantation on the South-Western edge of Bengaluru City. The institution is affiliated to Visvesvaraya Technological University (VTU), Belgaum, India.

At present JSSATE, Bengaluru has eight Under Graduate and two Post Graduate programs in Engineering along with a Under Graduate program in BSc. (Hons) and post Graduate program in Business Administration. All the Departments have been recognized as “research Centres” from VTU, Belagavi. The total strength of students is more than 3000.

JSSATE, Bengaluru has an excellent infrastructure with the state-of-the art equipment and machinery as laboratory facilities. The Institution has spacious classrooms and the laboratories. The whole building is networked and has centralized browsing facility with 500 Mbps dedicated internet facility. The entire college has Wi-Fi facility.

The Institute has highly qualified faculty. The Institute has initiated a number of multidisciplinary and multi-institutional R&D programs with AICTE, DST and other Departments. Under the R & D activity, the Institute has taken up the design and fabrication of bio-diesel plant in collaboration with an industry and it is sponsored by Department of Science & Technology (DST), Government of India. This was recognized as one of the best-completed projects and same is being replicated in different states.

The Institute has a centralized library with open access facility for students. The Institute Digital library has online access to international journals. Book bank facility is available for students.

Vision of the Institute

To be among the finest Institutions providing Engineering and Management Education empowered with research, innovation and entrepreneurship.

Mission of the Institute

- Strive towards Excellence in teaching–learning process and nurture personality development.
- Encourage Research, Innovation & Entrepreneurship.
- Train to uphold highest ethical standards in all activities.

Quality Policy

- Achieve Excellence in Technical Education, Research and Consultancy through an Outcome Based Education
- Focus on Continuous Improvement and Innovation by Benchmarking Against the Global Best Practices.

Statutory Approvals & Recognitions



• Accreditation

The following Departments are accredited by National Board of Accreditation, New Delhi, for the period of three years from with effective from 01.07.2020 till 30.06.2023

Sl. No.	Program
1	Computer Science and Engineering
2	Information Science and Engineering
3	Electronics and Communication Engineering
4	Mechanical Engineering
5	Civil Engineering

• Ratings



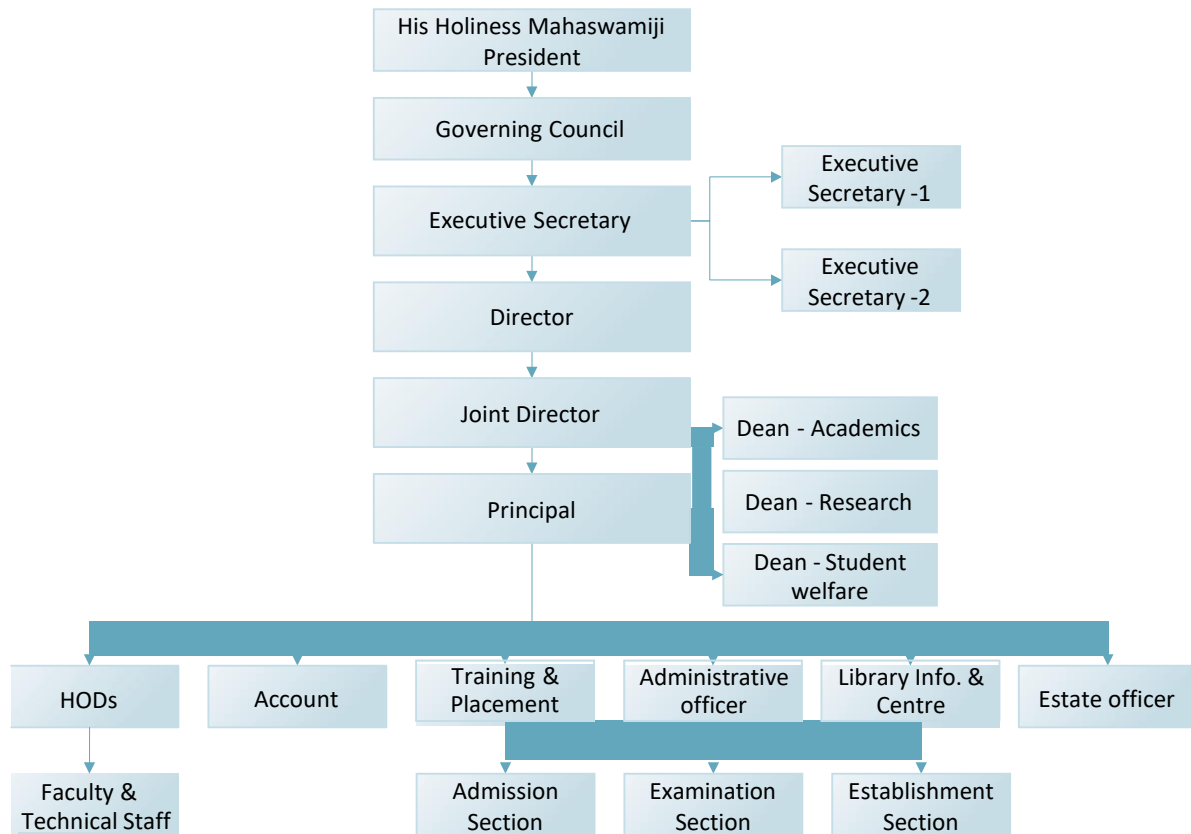
JSS Academy of Technical Education, Bengaluru, has been assessed on QS IGAUGE Methodology 1.2/1.3. by QS IGAUGE rating system.

• NIRF Ranking



The National Institutional Ranking Framework (NIRF) has ranked the institution in 251-300 band among engineering colleges in 2020.

Organizational Structure



Members of Board of Management

Sl. No.	Name	Designation
1	His Holiness Jagadguru Sri Shivarathri DeshikendraMahaswamijiPresident, JSS Mahavidyapeetha, Mysuru	Chairman
2	Justice Dr. Shivaraj V Patil Co-Chairman, JSS institutions, Bengaluru	Member
3	Dr. C G Betsurmath, KAS (Retd.) Executive Secretary, JSS Mahavidyapeetha, Mysuru	Member
4	Prof. M. H. Dhananjaya Advisor, Technical Education Division, JSSMVP, Mysuru	Member
5	Dr. H R Mahadevaswamy Joint Director, Technical Education Division, JSS Mahavidyapeetha, SJCE Campus, Mysuru	Member
6	Sri H K Shivananda, IAS (Retd.) Retired. IAS Officer, Bengaluru	Member
7	Dr. S M Jamadar, IAS (Retd.) Former Chairman, JSSTICE, Bengaluru	Member
8	Dr. B. G. Sangameshwara Former Vice-Chancellor, JSS Science and Technology University, Mysuru	Member
9	Prof. B. Gurumoorthy Chairman, CFPDM, IISc, Bengaluru	Member
10	Dr. Shyam Vasudeva Rao Industrialist, M/s Forus Healthcare Pvt. Ltd. Bengaluru	Member
11	Dr HilarianPushparaj General Manager, M/s Mindtree Technologies, Bengaluru	Member
12	Sri Sagar Nidavani Executive Council Member, VTU, Bengaluru	Member VTU Nominee
13	Dr. R Sakthivel Director, South West Regional Officer, AICTE, Bengaluru	Member, AICTE Nominee EX-Officio
14	Sri. H U Talawar Director of Technical Education, GOK, Bengaluru	Member DTE, Ex-Officio
15	Dr. Poornima N Associate professor, E & C Department, JSSATE, Bengaluru	Member Faculty representative
16	Dr. Bhimasen Soragaon Principal, JSSATE, Bengaluru	Member Secretary

Academics

The academic division steers the teaching programs within the institution. The profiles of the division include admissions, regulation of academic programs, strategic planning for the new academic programs and its implementation, arrangement of various meetings, academic collaboration including signing of MoU's. The academic section also conducts faculty evaluation for their performance annually. Continual improvement of the faculty is ensured by participation of faculty members in various seminars, workshops and symposia. Internal Quality Assurance Cell being an integral part of the academic team ensures implementation of quality parameters in every aspect of academics at JSSATEB. Extra & co-curricular activities are organised and supervised by the academic team. The student support and welfare along with the supervision of the University level NSS activities are under the purview of the division. Alumni engagements and placement activities of the division cater to the post-educational needs and connectivity of its students. The division owns the responsibility of strengthening and diversifying the academic exposure to the students through appointment and planning of adjunct/visiting faculty visits. The onus of document and submission of half yearly and annual report of JSSATEB is with the division.

Dr. Bhimasen Soragaon
Dean (Academics)

NPTEL

- JSSATEB is recognised as the Local Chapter by SWAYAM-NPTEL.



SWAYAM or Study Webs of Active-Learning for Young Aspiring Minds. SWAYAM is a programme initiated by Government of India and designed to achieve the three cardinal principles of Education Policy viz., access, equity and quality. The

objective of this effort is to take the best teaching learning resources to all, including the most disadvantaged. SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. National Programme on Technology Enhanced Learning (NPTEL) is a project of MHRD initiated by seven Indian Institutes of Technology (Bombay, Delhi, Kanpur, Kharagpur, Madras, Guwahati and Roorkee) along with the Indian Institute of Science, Bangalore in 2003, to provide quality education to anyone interested in learning.

NPTEL local chapter was started in JSSATE, Bengaluru from 26thDecember 2016. As a source of information and other than syllabus oriented, around 8GB of previous NPTEL course materials is made available in the Digital Library. These materials are circulated to its users as and when demanded by them. This NPTEL local chapter centre is being coordinated by Dr. Dayananda P, Professor, Dept. of ISE as SPOC. IITM has declared JSSATEB-NPTEL chapter as one of the active local chapter amongst local chapters of South India.

Cultural Crew

The logo for VERVE is displayed in a bold, orange, sans-serif font. The letters are closely spaced and have a slight shadow effect.

JSS Academy of Technical Education, Bengaluru has been giving equal importance to both academic and other activities. Institute strongly believe that both curricular, co-curricular and cultural activities are equally important for the overall development of students. To encourage the students to participate in different activities, the institution has created a platform called VERVE – a techno cultural fest. Under this platform college organize many technical and cultural activities every year. VERVE has created a brand name in and around Bengaluru and emerged as number one techno cultural fest among the technical institutions in Bengaluru.

VERVE - 2022

VERVE, Techno-Cultural festival celebrated every year by the students of JSS Academy of Technical Education, Bengaluru.

Techno cultural fest - VERVE'22 was organized in the college from 16th -18thJune 2022. The program was inaugurated on 16thJune 22 at 11 AM by Sri Hanumesh V J, Associate Vice President, Education Training and Assessment, Infosys Ltd. Sri Suraj Gowda, Kannada Cini Artist was the chief guest of the Inaugural function. Sri. Hanumesh V J highlighted the importance of skilled engineers for the development of the country. He also stressed that engineers should maintain good health and fit enough to serve the society better. Chief guest Sri Suraj Gowda mentioned that participating in cultural activities helps to find new avenues in students' career. He also mentioned that engineering knowledge helps to the larger extend to build individual's career irrespective of their profession. Twenty-three faculty members were felicitated by the chief guests. Dr. Bhimasen Soragaon, Principal and President of the inaugural function mentioned that, the fest is the platform for students to acquire and understand the different cultures and also to exhibit student talents and showcase their managing capabilities. Dr. D V Ashoka, Dean Research delivered the Vote of Thanks. Around 1000 students and staff members witnessed the program. During the Verve'22, a total of 24 events were conducted over a span of 3 days. 500 students from various institution registered and participated in events and won cash prize worth of around Rs.70,000/- The VERVE'22 was successfully conducted with the support of all the Students, Core Committee members, Department staffs and members of the Cultural Committee.



Photos of the Verve'22 Inaugural Program

Social Outreach Program

National Service Scheme (NSS)



The National Service Scheme (NSS) is an Indian government-sponsored public service program conducted by the Department of Youth Affairs and Sports of the Government of India. Popularly known as NSS, the scheme was launched in Gandhiji's Centenary year, 1969. NSS (National Service Scheme) activity is one of the primary activities for social services and learning importance at the very young stage while students are graduating. NSS unit in JSS Academy of Technical Education, Bengaluru is active since the inception of this institution. NSS unit of JSSATEB has conducted many social services namely Swachh Bharath Abhiyan, Blood Donation Camp, Preparation and Plantation of seed-balls, Special camp, Health check-up camp and Walkathon to raise awareness about drugs etc.

NSS Events: 2021-22

NSS Day Celebrations



NSS Day celebrated on 29thSeptember 2021. NSS and YODHA student club volunteers along with the teachers and staffs of all departments of took part in the event. On the occasion of NSS Day celebration a talk on “Contribution of Youth towards Nation Building” was delivered by Ms. Vandana Shastry, social activist, environmentalist, an academician, certified Master Trainer from NSDC govt of India, mentor, coach, counsellor and Entrepreneur.

Swachh Bharat Abhiyan



On the occasion of the 75thyear of Indian Independence, NSS Unit of JSSATE, Bengaluru has organized Swachh Bharat Abhiyan on 25thOctober 2021. 100 NSS volunteers and more than 200 students participated in this event. Students were divided into number of subgroups and assigned specific roads around JSSATE Bengaluru. Students are enthusiastically participated in this event and collected plastic waste. Around 250 kg of plastic waste collected in this event.

Communal Harmony Campaign Week (19-25 November 2021)



On the occasion of Communal Harmony Campaign Week (19-25November 2021), NSS Unit of JSSATE, Bengaluru has organized essay writing and drawing competitions on the theme “Communal Harmony and National Integration” on 25 November 2021. 22 students were participated in the event. Drawings and essays are scrutinized for the relevance to the theme and three winners are selected from each category. The first, second and third prize winners, got prize money of Rs. 1000/-, Rs. 750/- and Rs. 500/- respectively.

Good Governance Week: A talk on “Sakaala Service”



Good Governance week is observed from 20-26 December 2021 to celebrate the strides made by India in promoting citizen-centric governance and improving service delivery in line with “Azadi Ka Amrit Mahotsav” celebrations to commemorate 75 years of progressive India. Good Governance Day is observed in India annually on 25 December to honour the birth anniversary of former Prime Minister Atal Bihari Vajpayee by fostering awareness among the Indian people of accountability in government. Mr. Veeresh C S, Administrative Officer, JSSATEB delivered a talk on “Sakaala Services” of the state government of Karnataka. He educated students about the “Good Governance” and the Right to Information (RTI) act.

Martyr’s Day: Tribute to freedom fighter



30 January is observed as Shaheed Diwas annually to mark the death anniversary of Mahatma Gandhi. Martyrs’ Day is also known as Shaheed Diwas and in India, it is celebrated on two days namely on 30 January and 23 March, to pay homage to the freedom fighters who sacrificed their lives for the sake of their Motherland. The Chief Guest Prof. Ravi Varma enlightened our students about the sacrifice made by freedom fighters to make India free from colonizers. He shared the memorable movements

of the father of our nation, Mahatma Gandhiji. Also, he motivated our students to devote their lives to the betterment of the motherland.

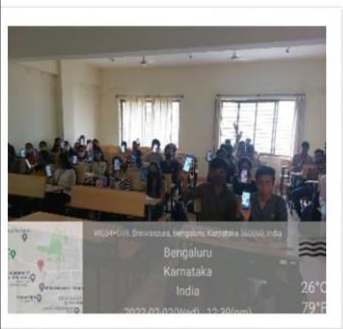
National Voters’ Day: Pledge taking ceremony



In order to encourage more young voters to take part in the democratic process, Government of India has decided to celebrate 25 January as "National Voters’ Day". It has been started from 25 January 2011 to mark the Foundation day of Election Commission of India, which was established on this day in the year 1950. Students are educated to enrol their names to voters’ list and cast their votes on every election. Around 2000 students, NSS Volunteers and staff members took the following National Voters’ Day pledge on 25

January 2022 at 11.30 am in their respective class and labs.

“Azadi Ka Amrit Mahotsav”: Fit India Mobile application downloads



On the occasion of “Azadi Ka Amrut Mahotsav”, Honourable Prime minister launched “Fit India” mobile application. The application provides suitable fitness guidance and evaluates individual fitness status based on the accomplishment of activity goals. NSS volunteers, students and staffs are educated to download the “Fit India” mobile application and get benefited. Also, requested to spread the awareness about the application among citizens and join hands in making healthy India.

Pulse Polio Awareness Program



On the occasion of the Pulse Polio Drive the NSS unit of JSSATE, Bengaluru organized Pulse Polio Awareness Program at Agara and Tataguni villages on 26th February 2022. About 75 NSS and Yodha volunteers participated in the awareness program. Volunteers are made two groups and advised to follow all the covid protocols. Students marched along each and every road of Agara village and made the villagers aware about the Pulse Polio Drive.

Campus Cleaning Drive



NSS unit of JSSATE, Bengaluru organized Campus Cleaning Drive at JSSATEB Campus on 19th March 2022. About 54 volunteers participated in the program. All the volunteers are advised to follow all the covid protocols. Students are practiced NSS claps. All the volunteers took following cleanliness pledge along with NSS Programme Officer. Volunteers are made four groups and assigned

different location in the campus. Students participated enthusiastically in the campus cleaning drive and most of the campus is cleaned.

School Bell - 75



The NSS unit of JSSATE Bengaluru participated in "School Bell -75" and painted the primary school, Seegehalli near K R Puram, Bengaluru on 27th April 2022 in association with Campus to the community on the occasion of Azadi Ka Amrit Mahotsav. About 33 NSS volunteers participated in this event. We are proud to be a part of "Rejuvenation of 75 Government Schools" on the occasion of 75 years of Independence and cherish the ideals and morals of our FREEDOM FIGHTERS in their hometowns.

NSS Special Camp

The NSS unit of JSSATE Bengaluru conducted NSS Special Camp in the adopted village Agara, KengeriHobli, Bengaluru from 16-22 May 2022. About 60 NSS volunteers participated in this event. Mr. C



Narasimhamurthy, the President of AgaraGrama Panchayath encouraged NSS Volunteers to do social service activities in the Agara village with maintaining harmony with residents of village. As a token of appreciation, books were presented to all the guests of the function from NSS Unit, JSSATEB. The following social service activities are done in the Agara village. Cleaning the premises of Grama Panchayath,

Bus Stand, School, Grama Panchayath registration building, Arogya Kendra, roads and drainage of Agara village. Volunteers visited both primary and high school, taught English, Mathematics, and personal hygiene to the school children. School children were trained for singing, dancing and acting. On Saturday 21 May 2022 trained children demonstrated their talent in the cultural program. About 100 plants are planted near Agara village and lake. A garden is created in the school premises. Conducted awareness program of the topics: Swachh Bharath Abhiya, Segregation of waste, Water conservation, saving forest and online services provided by government. About 4000 seed-balls are made during the seed-ball workshop.

Blood Donation Camp



The NSS Unit and Information Science and Engineering Department in association with Rotary Bengaluru Gnanakshi Club and Rashtrathana Blood Bank organized Blood Donation Camp in the Library premises on 15th June 2022 at JSSATE, Bengaluru. About 187 units of blood collected.

Drug Awareness Walkathon



The NSS unit and students of JSSATE, Bengaluru participated in the "Drug Awareness Walkathon", organized by the State Excise Department, Government of Karnataka on 26th June 2022 at Kanteerava Outdoor Stadium, Bengaluru. This event attracted about 15000 students from all over Karnataka. About 80 students of JSSATE, Bengaluru participated in this event. The Minister of

Excise Department, Government of Karnataka Mr. K Gopalaiah, inaugurated the event. Sports Minister Mr. Narayana Gowda and many other delegates from film industry were present in the event. The walkathon started from Kanteerava outdoor stadium. Students shouted slogans namely: "Say No to Drugs and Yes to Life". To spread awareness about drug addiction, students walked more than 8 KMs from stadium to Trinity circle via M G road.

Save Soil



The NSS unit of JSSATE, Bengaluru organized a talk on the topic "Save Soil" on the occasion of World Environment Day on 8th June 2022 by Mrs. Yamini Vinay, Volunteer from ISHA Foundation and Conscious Planet. About 120 students participated in the program. Speaker Mrs. Yamini Vinay enlightened our students about how Soil is contaminated and how could it can be prevented. She emphasizes, that it is our responsibility as human beings to leave behind a beautiful, vibrant, fertile planet that can sustain the lives of future

generations and all life around us. Students practiced the signature step of the Save Soil Movement. All the students took a pledge to support the global initiative of Sadhguru to Save Soil.

International Yoga Day



Youth Red Cross and NSS unit of JSSATE, Bengaluru organized International Yoga Day at JSSATEB Campus on 21 June 2022. Dr. Bhimasen Soragaon, Principal, Dr. B P Shivakumar, Dean- Student Welfare, Mr. Veeresh C S, Administrative Officer, Dr. Girish N, NSS Programme officer of JSSATEB, and about 40 volunteers participated in the program.

Vanamahotsava



The NSS unit of JSSATE, Bengaluru conducted Vanamahotsava on 7th July 2022 at JSSATEB Campus under the guidance of Dr. Girish N, NSS Programme Officer, JSSATE, Bengaluru. About 20 students participated in the program. Volunteers enthusiastically participated, even in the drizzling rain and planted around 20 plants in the JSSATEB Campus.

UNNAT BHARAT ABHIYAN



उन्नत भारत अभियान
UNNAT BHARAT ABHIYAN

The conceptualization of Unnat Bharat Abhiyan (UBA) started with the initiative of a group of dedicated faculty members of Indian Institute of Technology Delhi working for long in the area of rural development and appropriate technology. The concept was nurtured through wide consultation with the actively involved people in rural development viz., representatives of a number of technical institutions, Coordinators of Rural Technology Action Group, Voluntary organizations and Government agencies, etc. during a national workshop held at IIT Delhi in Sept. 2014. The program was formally launched by the Ministry of Education in presence of The President of India on 11th Nov. 2014. People can participate in UBA in any of the capacities such as a prospective Mentoring Institute, a Participating Institute, as a Subject Expert, as a Voluntary Organization, as a Developmental Agency, as a Philanthropist or a CSR Promoter, as NSS Member, As an Enthusiastic Volunteer, etc. based on the present status, competence and interest of the individual. JSSATE, Bengaluru was selected as a Participating Institute from UBA in the academic year 2018-19. JSSATEB has adopted 05 villages under UBA (Bettanapalya, Bheemanakuppe, Maragondanahalli, Ramohalli, Challaghatta).

Youth Red Cross



Youth Red Cross

The Youth Red Cross (YRC) is a most important constituent of its mother organization Indian Red Cross Society. YRC aims at inculcating the 7 fundamental principles of the Red Cross movement viz., Humanity, Impartiality, Neutrality, Independence, Voluntary Service, Unity and Universality. The Youth Red Cross is organized with a view to develop and deploy student youth resource for working towards these principles. JSS Academy of Technical Education, Bengaluru has been affiliated to the Youth Red Cross Wing of the Indian Red Cross Society (Karnataka State Branch) Bengaluru in terms of Government of Karnataka, Department of Higher Education. Vide Order No: ED 38 Vividha, 2016 dated: 17/06/2016. The YRC of JSSATEB organized Blood Donation Camps in collaboration with NSS unit of the institution.

DATTI AWARDS

To encourage and support the meritorious and economically weak students, many donors came forward and deposited some corpus amount in JSS Mahavidyapeeta, Mysuru. The interest earned by the deposited amount is being distributed to the students every year.

1. Smt. Suvarnamma and Shri A N Vishvesvarayya Datti award

This award was initiated by Sri. A N Vishvesvarayya from the academic year 2013-14. A corpus amount of Rs. 12 lakhs, deposited to JSS Mahavidyapeetha, Mysuru. The interest earned every year

by the deposited amount will be paid to 5 students. Students (four girl students and one boy student) will be identified for this award based on their family annual income and individuals' merit in 12th standard. A committee will be formed by the institution to identify the deserving students for the award and the amount will be given to the students during the month of May.

2. Sri Siddappa Siddalingappa Datti award

This award was initiated by Prof. S Siddappa (Retd. Professor, Dept. of Civil Engg., UVCE, Bengaluru) in the name of his father Sri Siddalingappa during the academic year 2001-02. A corpus amount of Rs. 35,000/- was deposited to JSS Mahavidyapeetha, Mysuru. The interest earned every year will be used to honour two top performers in eighth semester University examinations.

3. SreeShivarathrishwaraDatti award

This award was initiated by Dr. Mrityunjaya V. Latte, (Principal, JSSATE, Bengaluru) and Dr. A M Shivakumar (Former Administrative Officer, JSSATE, Bengaluru) from the academic year 2013-14. Two top performers will be considered for this Datti award based on the average highest marks scored in the two semesters during first year. A corpus amount of Rs. 50,000/- was deposited to JSS Mahavidyapeetha, Mysuru and the interest earned every year by this amount will be given for two meritorious students.

Student Club



Student volunteers of JSS Academy of Technical Education, Bengaluru on their own initiation started YODHA (The Warrior Within In) on 24th September 2013 to demonstrate their social awareness skill and help the needy one. Yodha implies a warrior. A fighter, Not to fight battles, not to wage wars but to bring peace to the irrational society of ours. Each one of us desperately wants a change in the way our society works. Every one of us are longing for a fresh breath of air. As the saying goes, "If you

want change, then, be the change", it is absolutely pointless and inappropriate to wait for something drastic to suddenly happen. It is our nation. Our India. We are the youth, the people responsible to make the drastic change a real thing. Realising our responsibility towards our country, we started with our small contributions. We thought we should start with the place we spend most of our time. Yes! Our college.

Training and Placement



2022 BATCH

JSS Academy of Technical Education, Bengaluru always feel proud and privileged to provide quality Engineering and Management students with highest ethical standards and contribute to the nation's growth. The institute has successfully placed the students in various companies in different sectors. The institute has observed substantial growth in number of opportunities provided for the students in the field of Engineering and Management. The Placement Department tries to bridge the gap between institution and industries by analysing the industry trends and expectation. The leading companies in from various sectors are invited to the campus and ensure that all the Objectives of Department.

Department of Sports



JSS Academy of Technical Education, Bengaluru has been giving equal importance to both Curricular, Co-curricular and extracurricular activities. To encourage the students to participate in sports activities, the institute has created all the necessary sports facilities. Department of Physical Education and sports was started in the year 1997 aims at all round development of the students' personality through sports activities. Our college Sports department has been organizing many sports events such as VTU Inter collegiate, Bengaluru

South Zone Cricket Tournaments, Inter-zone sports events. Karnataka State Cricket Association (KSCA), Bangalore has recognized our college cricket ground as one of the best turf cricket grounds in Karnataka. Our college sports department has been conducting series of cricket matches which include Division matches, Women's' Matches, Zonal Matches for Under 14, 16, 19, etc. throughout the year in association with KSCA.

Staff Details

Sl. No.	Name	Qualification	Experience
1	Mr.PraveenKumarUB Sports Secretary	B.E., M.Tech., (PhD)	08Years
2	Mr. Shivananda HB Physical Education Instructorgrade-1	M.PEd., M.Phil.	17Years
3	Mr.NandeeshGSports/Technic al HelperPh.	ITI (Diploma)	04Years

**List of events organized by Physical Education and Sports Department for the Academic year
2021-22**

Sl.No.	Date	Events details
1	15 Aug 2021	Independence Day Celebration.
2	16-22 Sept.2021	106 th Jayanthi Celebration of His Holiness Dr. Sri Shivaratri Rajendra Mahaswamiji.
3	9Nov. 2021	Kannada Rajyotsava Celebration.
4	15-16 Nov. 2021	VTU Inter Collegiate Bengaluru South Zone Shuttle Badminton Tournament (Menand Women), SJBIT Bengaluru.
5	19-20 Nov. 2021	VTU Inter Collegiate Shuttle Badminton Selection Trials (Menand Women), VVCE Mysuru.
6	21-25 Nov. 2021	BMSC Kreedostava-2021 Bengaluru.
7	24-25 Nov. 2021	VTU Inter Collegiate Bengaluru South Zone Table Tennis Tournament for Men and Women at RVCE Bengaluru.
8	29-30 Nov. 2021	VTU Inter Collegiate Bengaluru South Zone Men Volley Ball Tournament at JSSATE Bengaluru.
9	29-30 Nov. 2021	VTU Inter Collegiate Bengaluru South Zone Women Volley Ball Tournament at NMIT Bengaluru.
10	4-7 Dec. 2021	PES University International Level Sports Fest (Infini).
11	9-10 Dec. 2021	VTU Inter Collegiate Volley Ball Selection Trials forWomen, at NMIT Bengaluru.
12	13-14 Dec. 2021	VTU Inter Collegiate Bengaluru South Zone Kabaddi Tournament at JIT Bengaluru.
13	16-17 Dec. 2021	VTU Inter Collegiate Kabaddi Selection atDr. TTIT, KGF.
14	16-17 Dec. 2021	VTU Inter Collegiate Bengaluru South Zone Basket Ball Tournament for Men at T JHON IT, Bengaluru.
15	20-21 Dec. 2021	VTU Inter Collegiate Hokey Selection Trials for Men (Selected 1 Player the Name ofH. Ajay Kasyapa5th Sem Civil), at RYMCE Bellary.
16	27-28 Dec. 2021	VTU Inter Collegiate Bengaluru South Zone Men Football Tournament at VKIT Bengaluru.
17	29-30 Dec. 2021	VTU Inter Collegiate Bengaluru Zone Men Lawn Tennis Tournament at JSS ATE Bengaluru.
18	31 Dec. 2021 - 01 Jan 2022	VTU Inter Collegiate Single Zone Women Lawn Tennis Tournament, And Selection Trials and Coaching Camp Conducted in JSSATEB.
19	1-4 Jan. 2022	VTU Inter University Lawn Tennis Women Selection Trials and Coaching Camp at JSS ATE Bengaluru
20	26 Jan. 2022	Republic Day Celebrations

Visvesvaraya Technological University “Men South Zone Volley Ball Tournament



JSS Academy of Technical Education, Bengaluru organized “V.T.U Men South Zone Volleyball Tournament” on the date of 29th November 2021. 20 teams from Bangalore south zone have participated. Match was held on knockout basis as per V.T.U guidelines. SJBIT, Bengaluru and RVCE, Bengaluru colleges in the South zone were qualified for the finals. SJBIT, Bengaluru has won the tournament.

Visvesvaraya Technological University “Inter Collegiate Bengaluru Zone Men Tennis Tournament”



VTU Inter Collegiate Bengaluru Zone Men Tennis Tournament Inaugurated in the presence of Sri.Saravanan.R Regional Director, VTU Bengaluru Zone, Dr. Mrityunjaya V Latte, Principal JSSATE Bengaluru, Sri Veeresh.C Administrative Officer JSSATE Bengaluru and Department of Sports JSSATEB, on 29th December 2021.

11 teams from Bengaluru zone have participated in this event. RVCE, Bengaluru has secured 1st place in the tournament. RVITM, Bengaluru have secured 3rd place.



VTU Inter Collegiate Single Zone Men Tennis Tournament Inauguration program was held in the presence of Dr. Shiva Ram Reddy, Physical Education Director, BMSCE, Bengaluru, Mrs. Kavya Physical Education Director NIE Mysuru, Dr. Mrityunjaya.V Latte, Principal JSSATE Bengaluru, Sri Veeresh.C Administrative Officer JSSATE Bengaluru and Department of Sports JSSATEB, on 31st December 2021.

8 teams from Karnataka zone have participated in this event. VVCE, Mysuru has secured 1st Place and MSRIT, Bengaluru secured 3rd place.

Prestigious Recruiters



Training & Development

The Training & Placement Cell at JSSATE, Bengaluru organizes the following training programs for the students;

- Aptitude related Analytical Skills for enhancing analytical skills of students.
- Soft skills are a quite essential qualification for professionals aspiring to move up the value chain especially attitude, communication and presentation.
- Group Discussions are organized to promote skills of interaction in group and leadership styles. The company executives/ employers will be invited to share their valued expertise on various topics, workplace situations with our students, current trends and future scenario.
- Mock Interview rounds will be conducted to build confidence and self-esteem in students to perform with ease in front of panel members during campus placements.
- Company Specific training programs will be conducted for all final year students on Aptitude related analytical skills, Group Discussion and Interview skills by Industry veterans just before the visit of MNCs.
- Eminent management personalities are invited to conduct workshops on Personality Development, Interpersonal and Communication Skills, Time management, Memory Management etc.
- Participation of students in activities that provide them all round personal and professional growth will be promoted.
- T&P Cell will coordinate various activities/ organize programs such as Career Goal Setting/ Planning/ Mapping, Mock Interviews/ Interviewing Techniques, Group Discussions, Case Studies, Resume Writing Referral, Professional Portfolio Development, Dressing Sense, Business Etiquette and Technology Management.

Placement Details for Academic Year 2021-22

Program	No. of students registered	No. of students eligible	No. of students Placed	No. of students with Multiple Offers	Salary Offered
CSE	137	96	87	40	3 to 16 Lakhs Per Annum
ISE	85	58	54	21	
ECE	118	78	59	24	
E&I	29	22	9	3	
ME	84	37	16	2	
IEM	44	30	20	3	
CIVIL	50	21	0	0	
Total	547	342	245	93	



Farewell-2022



Farewell Program for the final year students of B.E., M.Tech. and MBA was organized on 14.07.2022 in the college campus. The Chief Guest of the program was Mr. Manjunatha R, Director, Air Authority of India, Mysuru, Guest of Honour, Dr. H R Mahadevaswamy, Joint Director, Technical Education Division, JSS Mahavidyapeetha, Mysuru and the program was presided over by Dr. Bhimasen Soragaon, Principal, JSS Academy of Technical

Education, Bengaluru. The Chief Guest, Mr. Manjunatha R, emphasized the importance of education and articulated that the knowledge gained during the education supports the students in their future endeavours. He narrated his experience of commissioning of the Pakyong airport, Sikkim, a challenging job due to geographical constraints, agitation and the efforts in getting the licence from the Ministry of Civil Aviation. Informing the students about the opportunities in the aviation industry for all the disciplines of engineering, he added that the Karnataka is the first state to formulate civil aviation policy and according to the statistics, future of India in the aviation industry is very bright. He advised the students to be strong and healthy and interpreted the significance of health to be successful. He stated that the students are the brand ambassadors of the college and that they should

value the education the institution has given them. He encouraged the students to approach real-world challenges with a positive attitude and to take advantage of opportunities in the aviation industry. He concluded his address by advising the students that learning should never stop and the knowledge can be acquired only through education and it plays a very important role in professional life. Few students shared their experiences during their stay in JSSATEB and expressed gratitude to the teachers and to the Institute.

Launch of “JSS Journal of Scientific Studies: J-JSS”



The first issue of the journal was launched by the Chief Guest, Mr. Manjunatha R, and Guest of Honour, Dr. H R Mahadevaswamy, in presence of the Principal, Dean and editorial members on 14.07.2022. Dr. Nityanand Choudhary, Head, Department of Physics and Editor of J-JSS briefed about the journal and acknowledged the support of the Management, Principal, Editorial board, faculty members, reviewers and author contributions,

advisory board, publishers towards the first issue. Further, he elucidated that “JSS Journal of Scientific Studies: J-JSS” is a multidisciplinary free open access biannual journal, published in the month of January and July every year. He informed that the journal publishes research articles in the diverse areas of Engineering, Science and Management and will be published in both the print and online version. He added that the Journal also offers special issues devoted to advances in specific areas of Science and Engineering, proceedings of the conference in diverse areas of Science and Engineering.

Alumni

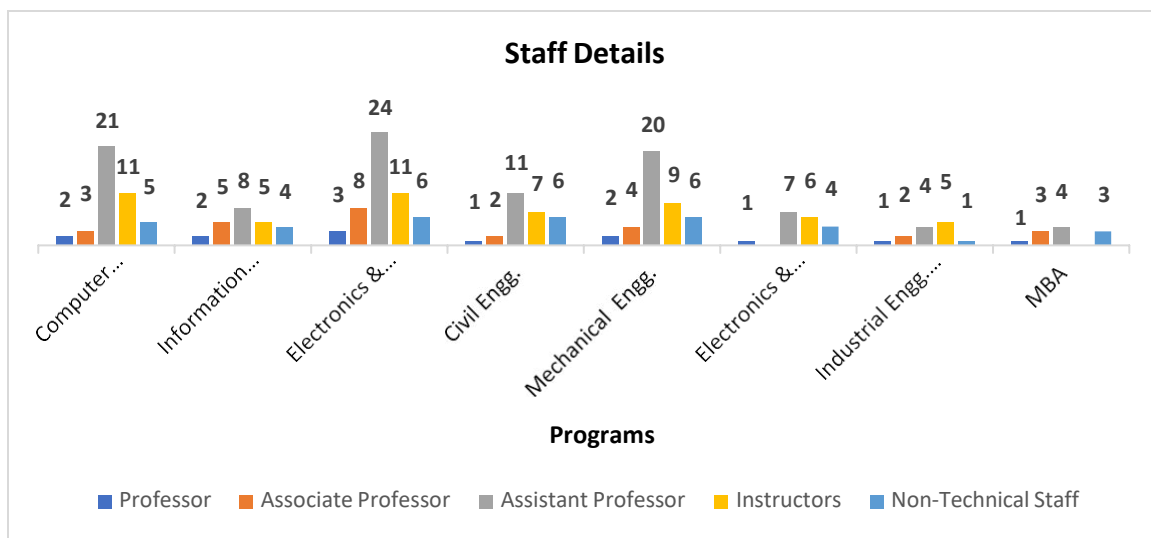
JSSATEB Alumni Association is formed with the sole objective of bringing all the JSSATEBians on to a common platform for mutual benefits. The 1st batch of students have rolled out of the institution in 2001. Since then, over 8000 students are passed out of this institution and occupied various positions in the organizations all over the world. The association became active since 2010 under the stewardship of Principal Dr. Mrityunjaya V. Latte. The 1st meet was held on 2012, since then regular meetings were held. It is also proposed to start JSSATEB Alumni chapters in other parts of India & worldwide.

Key Statistics of JSSATE, Bengaluru

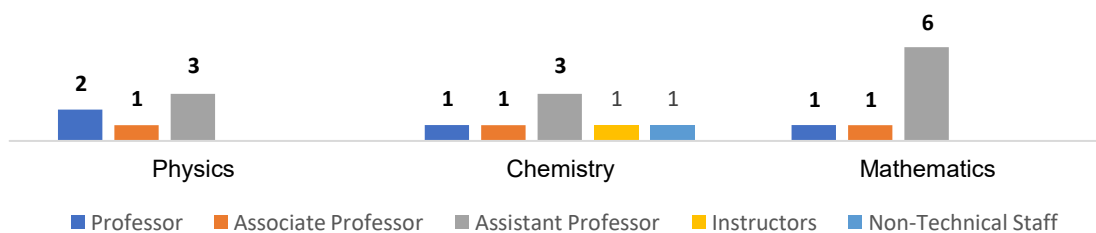
Admission Details for the academic Year 2021-2022

Sl. No	Branch	Sanctioned Intake	CET admitted	SNQ	COMED-K	Mgmt.	PMSSS	Total Admitted
1	Civil Engineering	60	17	3	0	15	0	35
2	Mechanical Engineering	90	18	4	0	16	0	38
3	Computer Science & Engineering	180	74	7	53	51	1	186
4	Electronics & Communication Engineering	180	103	9	20	45	0	177
5	Information Science & Engineering	120	51	6	32	35	2	126
6	Electronics & Instrumentation Engineering	60	30	3	0	15	0	48
7	Robotics & Automation Engineering	30	13	1	1	8	0	23
8	Artificial Intelligence & Machine Learning	60	25	3	17	17	0	62
9	Bachelor of Science (Hons.)	60	3	3	0	0	0	6
10	M.Tech in VLSI & Embedded Systems	12	0	0	0	0	0	0
11	M.Tech in Data Science	12	1	0	0	0	0	1
12	Master of Business Administration	60	27	0	0	33	0	60
	Total	984	362	39	123	235	3	762

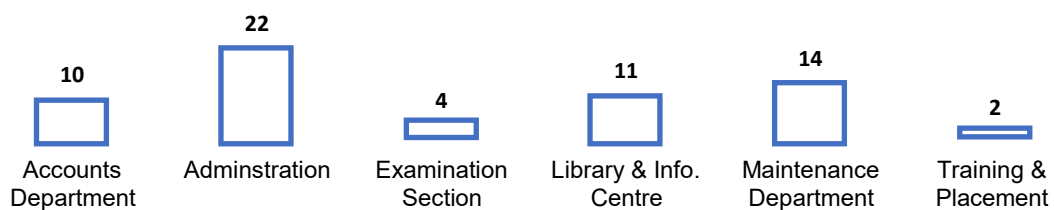
Staff Details



Basic Science Department



Office Staff



Number of faculty employed and left during the year 2021-22

Academic Year	No. of faculty members joined JSSATE-B	No. of faculty members left JSSATE-B
2021-22	07	07

Overall Result of the Institution

Year	Final Year	3 rd Year	2 nd Year	1 st Year
2021-22	92.81	71.53	49.37	Result Awaited

Fee structure for the Academic Year 2021-22

UG Programs

Sl. No	UG Course	Course Duration	I SEMESTER								
			CET			COMED-K			MANAGEMENT		
			Tuition Fee	College & Uni. Fee	Total	Tuition Fee	College & Uni. Fee	Total	Tuition Fee	College & Uni. Fee	Total
1	AIML	4 Years	58806	43220	102026	201960	42720	244680	201960	42720	244680
2	Automation & Robotics	4 Years	58806	43220	102026	201960	42720	244680	201960	42720	244680
3	Civil	4 Years	58806	43220	102026	59076	42720	101796	59076	42720	101796
4	Mechanical	4 Years	58806	43220	102026	59076	42720	101796	59076	42720	101796
5	Computer Science	4 Years	58806	43220	102026	201960	42720	244680	201960	42720	244680
6	Electronics and communication	4 Years	58806	43220	102026	201960	42720	244680	201960	42720	244680
7	Information Science	4 Years	58806	43220	102026	201960	42720	244680	201960	42720	244680
8	Electronics and Instrumentation	4 Years	58806	43220	102026	-	-	-	59076	42720	101796
9	Bachelor of Science (Hons.)	4 Years	23560	28220	60000	-	-	-	-	-	-

PG programs

Sl. No	PG Course	Course Duration	I SEMESTER					
			PGCET			MGNT.		
			Tuition Fee	College & Uni. Fee	Total	Tuition Fee	College & Uni. Fee	Total
1	MBA	2 Years	50000	47490	97490	50000	73960	123960
2	M.Tech	2 Years	60000	34190	94190	-	-	-

Hostel Fees for the Academic year 2021-22

Hostel fee details (Girls & Boys)	<ul style="list-style-type: none">• Rs. 1,42,500 per year for single sharing basis, Girls Hostel.• Rs. 82,500 per year for three sharing basis, Girls Hostel.• Rs. 83,000 per year for Boys' Hostel• Rs. 1,10,000 per year for single sharing, Boys Hostel
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DEPARTMENT OF CHEMISTRY

Webinar/SDP

1. The need to move towards inter and Trans-disciplinarily research for impactful innovations

The Department of Chemistry, JSSATE, Bengaluru, has organized the International webinar on “The need to move towards inter and Trans-disciplinarily research for impactful innovations” on 24th September 2021. The webinar received a considerable response from participants, with 417 distinguished Professors and Research students have registered from both home and abroad. More than 250 delegates participated on the zoom platform, and about 100 have witnessed in the seminar hall. The event was also broadcast live on YouTube for a more significant benefit.

Dr. B. Mahesh, Associate Professor, Department of chemistry JSSATEB, presented the welcome speech and introduced the speaker to the august audience.

The speaker described the exponential growth of scholarly knowledge over the past 300 years. He also expressed that the development of all civilization has taken place due to deep roots in intellectual, scientific thinking. He delineated with the introduction about the National University of Singapore and deliberated on the need of the India National Education policy 2020.

Further, he stressed on the need for Inter & Trans-disciplinary research and its importance referring to Galileo, father of modern science and described his work as a polymath. A polymath is an individual whose knowledge spans many subjects known to draw on complex bodies of knowledge to solve specific problems. He explained the massification of scientific research across the globe and the use of big data analytics and AI in bibliometrics of research. He stressed on the requirement of shifting from mono discipline to polymath/cross-discipline/trans discipline/interdisciplinary research to address humanity's scientific challenges and urged to take a holistic innovation approach. He highlighted that the USA has 2650 highly cited researchers, and 40% are known for cross-field research performance. He accentuated there should be a need to change the perspective of research. He underlined that the future conferences would focus on the best practices in research communication and affirmed India's future in inter and trans-disciplinary research-leading to impactful innovations.



Fig: Snapshots of event

Professor spotlighted that India is the only country that has approved the world's first DNA Covid-19 shot and stated that the innovation of DNA-based vaccine is multidisciplinary research. He illustrated that the innovation in air purifiers, use of cleaner fuels by India to meet the country's climate goals and Life3 Biotech to incorporate electrospinning into food tech by the researchers from NUS Engineering are utilizing the trans-disciplinary approach. He remarked that the life purpose of the social entrepreneur is to change the world by trans-disciplinary research. Many professors and students have participated in the interactive session with the professor.

Prof H R Mahadevaswamy, Joint Director, Technical Education Division, JSSMVP, addressed the gathering and congratulated the speaker for an aesthetic presentation. Further, Joint Director portrayed the the research in JSS Technical institutions, and JSSAHER has well-cited publications and also moving into trans-disciplinary research. He requested the speaker to mentor JSS institutions towards outstanding achievements in the study. Finally, the webinar was concluded with vote of thanks by Dr. Rathna A, Head & Professor. The program was compered by Dr. Chamaraja N A, Assistant Professor, Department of chemistry, JSSATE Bengaluru.

2. Science day-2022 Celebrations

The discovery of the Raman Effect by Sir Chandrasekhara Venkata Raman was commemorated on the 28th of February of every year as a National Science Day by the National Council for Science and Technology Communication (NCSTC). On account of Science day, the Department of Chemistry, JSSATE, Bengaluru, organized competitions such as a) **Essay writing Competition** on "Renewable energy: A boon to sustainable development" b) **Technical talk** on "Advancement in science and technology for sustainable development", and c) **Science Quiz**, for the students from 21-2-2022 to 25-2-2022. More than 100 students participated actively in the events.

On 26.02 2022, Valedictory of science week was celebrated as National science day. The program commenced with the invocation from Rachana Ravishankar (I SEM ECE) & Ankitha Vishwanath (I SEM ISE). Dr. B. Mahesh, HOD & Associate Professor, Department of chemistry, JSSATEB welcomed the guests and introduced the activities of the chemistry department and introduced the chief guest Dr. Shashishekar Shivaswamy, Head of Flight Physics Department, Airbus Group India Pvt. Ltd., Bengaluru, Winners of technical talk competition have presented their talk on "Science and Technology for sustainable development" to the audience.

The Chief Guest delivered a lecture on "Integrated approach in Science and Technology for Sustainable Future". Dr. H R Mahadevaswamy Joint Director, Technical Education Division, JSS Mahavidyapeetha was the guest of honor, addressed the students, and the faculty accentuated the significance of science on technology for sustainable development. He gave information on the JSSMVP's and Technical division's initiatives on science and technology about the overall development of students. Further, the Joint Director appreciated the students for their active participation and also the department of chemistry for initiating and successful conductance. The cash prizes and certificates for the winners of the competitions had distributed.





Fig: Science day photos

The program was presided over by Dr. Mrityunjaya V Latte, Principal, JSS Academy of Technical Education, Bengaluru, and highlighted on the theme of the science day and congratulated the winners and the department for its various initiatives in the institution. Dr. Roopashree B, Assistant Professor in Chemistry, proposed the vote of thanks.

3. Skill and Upskilling for Employability

Objective:

- To educate the students about the essential skillset required to explore the employment opportunities available in industry for the Engineering graduates.
- Exposure to industrial work culture.
- To get trained and get suitable placement/employment at reputed Industry/organization.

Report: Day-1

The student development program inaugural session was at 10.30 am. The chief guest for the inaugural session was Mr. Srinivasa Gopal, Senior Manager, DesignTech, Bengaluru, Guest of Honor, Dr. H R Mahadevaswamy, Joint Director, TED, JSSMVP, Mysore and Dr. D V Ashoka, Incharge Principal & Dean R&D, presided over the function.

The inaugural session commenced with invocation by Ms. Rachana Ravishankar, II sem, ECE. Dr. Mahesh B, HOD-Chemistry delivered welcome speech and Dr. Roopashree B, Asst. Professor, briefed about the student development program. The Mr. Srinivasa Gopal, Chief Guest advised the students to develop right knowledge, skill and attitude to be employable. He urged the students to acquire the skills

required by the industry. Dr. H R Mahadevaswamy, Guest of Honor, highlighted the importance of industrial skills along with the classroom knowledge. He briefed about diverse skills such as communication skills, leadership skill, soft skills, problem solving skill and employability skills and advised the students to imbibe them, upgrade the knowledge to be employable. He also insisted students to get benefited by the programs such on AI, deep learning and SDPs conducted by the college. Dr. D V Ashoka, in his presidential remarks urged the students to gain the skills which are important to be successful in their career. The session was concluded with vote of thanks proposed by Mrs. Kathyayani D, Asst. Professor.

The succeeding session witnessed presentation by Mr. G Nagendra who gave insight on the facilities at GTTC and how students can avail them. Mr. Srinivasa Gopal introduced the students to the centre of excellence lab facility created by the GTTC, Robotics, CNC milling and machining and Mr. Deepak, on IOT, Mechatronics' labs and the skillset required to work in these fields through video demonstration.

The II semester students of ME, R&A, EC and EIE branches visited the centre of excellence laboratory at GTTC, Bengaluru to gain more knowledge and to have practical knowledge of some of the skill labs.





Fig :snapshots of event





Fig: Visit to Centre of Excellence, GTTC, Bengaluru.

Outcome:

- Able to understand the importance of skill to be employable.
- Knowledge about multiple skills.
- Understand the Industry work culture.

DEPARTMENT OF CIVIL ENGINEERING

1. Webinar on "Internship Opportunities in Plumbing Design and scope of Plumbing Design for Civil Engineers".

Department has organized Webinar on "Internship Opportunities in Plumbing Design and scope of Plumbing Design for Civil Engineers" through virtual mode on 18th August 2021 in association with Civil Engineering Association and Bangalore Institute of Technology.

About the Speaker - Asif Akhter, CEO, Prinston Smart Engineers

Topics covered:

- Electrical Infrastructure Design
- HVAC Design
- Plumbing Design
- Ducting & Thermal Insulation Works
- Industrial Installations Works
- IT Services

- Web development
- Skill Development Training

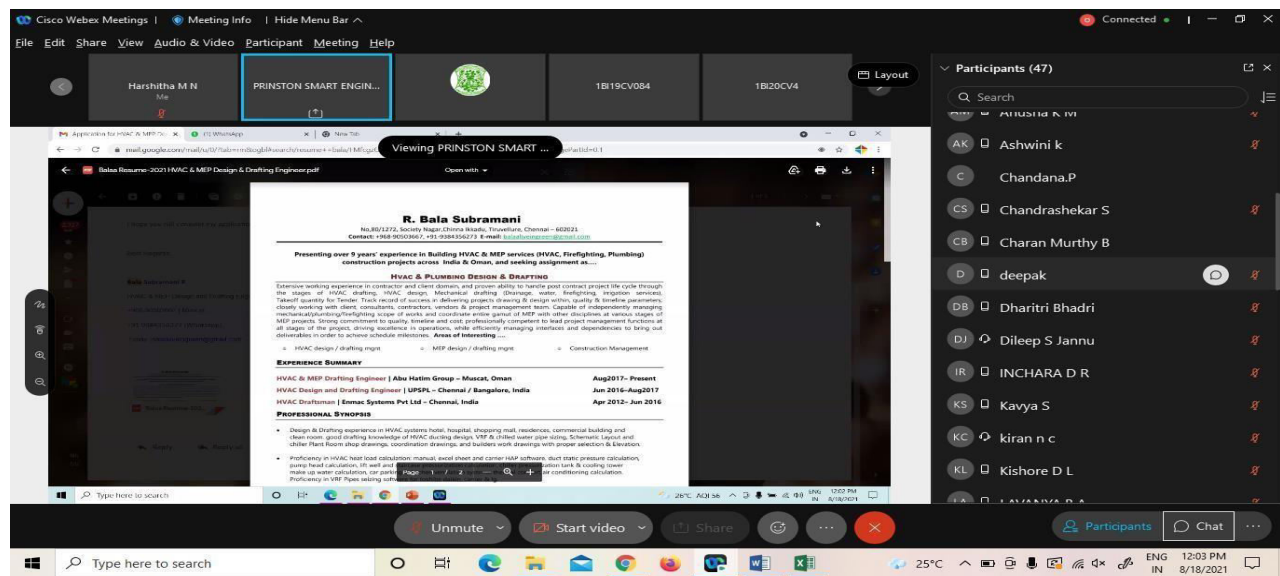
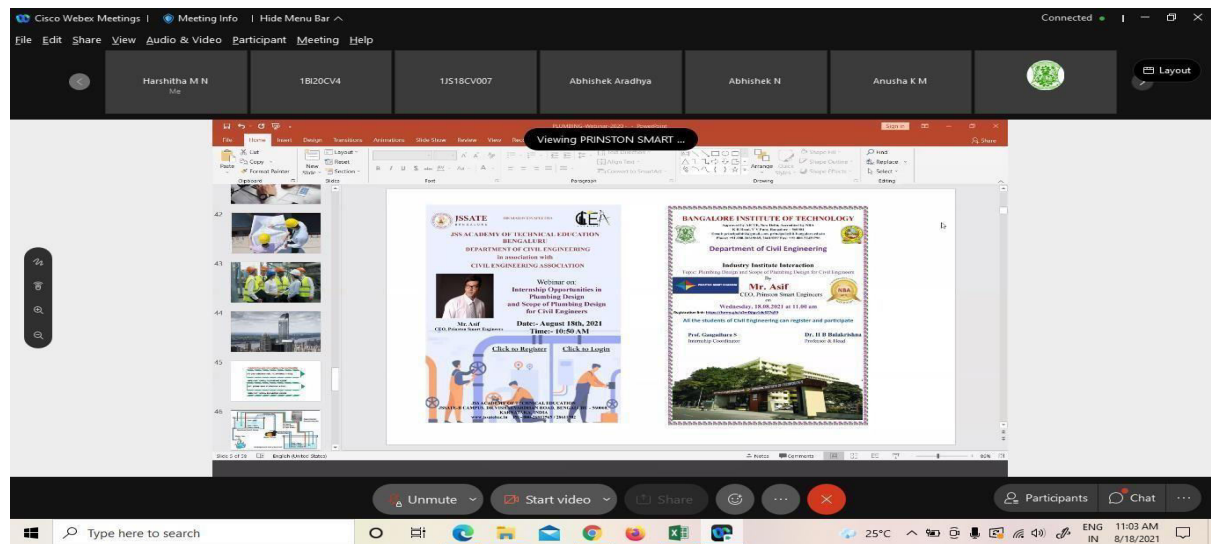


Fig: Webinar on "Internship Opportunities in Plumbing Design and scope of Plumbing Design for Civil Engineers".

2. Training program for “KRIDL Engineers”

Department of Civil Engineering, Centre for Interdisciplinary Research, JSS Academy of Technical Education, Bangalore in association with Karnataka Rural Infrastructure Development Limited organized a two-day technical training program for engineers of Karnataka Rural Infrastructure Development Limited on 23rd and 24th of October 2021.

The program was organized to disseminate and introduce the KRIDL engineers about the latest advancements in the construction materials and techniques.



ಹಳ್ಳಿಗಳ ಅಭಿವೃದ್ಧಿಗೆ ಸಂಪೂರ್ಣ ತಾಂತ್ರಿಕ ಕೌಶಲ ಬಳಸಿ: ರುದ್ರೇಶ್ ಕೆಆರ್‌ಐಡಿಎಲ್ ಎಂಜಿನಿಯರ್‌ಗಳಿಗೆ ತಾಂತ್ರಿಕ ತರಬೇತಿ



"ತಾಂತ್ರಿಕ ಅಭಿವೃದ್ಧಿ" ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಕೆಆರ್‌ಐಡಿಎಲ್ ತಾಂತ್ರಿಕ ವಿಭಾಗ ಅಧ್ಯಕ್ಷರು, ಕೆಆರ್‌ಐಡಿಎಲ್ ಸಿಬ್ಬಂದಿ ಮತ್ತು ಕೆಆರ್‌ಐಡಿಎಲ್ ಸಿಬ್ಬಂದಿಗಳು. ಕೆಆರ್‌ಐಡಿಎಲ್ ಸಿಬ್ಬಂದಿಗಳು ತಾಂತ್ರಿಕ ತರಬೇತಿ ಪಡೆದಿದ್ದಾರೆ. ಕೆಆರ್‌ಐಡಿಎಲ್ ಸಿಬ್ಬಂದಿಗಳು ತಾಂತ್ರಿಕ ತರಬೇತಿ ಪಡೆದಿದ್ದಾರೆ. ಕೆಆರ್‌ಐಡಿಎಲ್ ಸಿಬ್ಬಂದಿಗಳು ತಾಂತ್ರಿಕ ತರಬೇತಿ ಪಡೆದಿದ್ದಾರೆ.

'ಹೊಸ ತರಬೇತಿ ನೀಡಿ ಜಾರಿಗೆ ತರಲಾಗಿದೆ'



ಕೆಆರ್‌ಐಡಿಎಲ್ ಅಧ್ಯಕ್ಷರು, ಕೆಆರ್‌ಐಡಿಎಲ್ ಸಿಬ್ಬಂದಿ ಮತ್ತು ಕೆಆರ್‌ಐಡಿಎಲ್ ಸಿಬ್ಬಂದಿಗಳು. ಕೆಆರ್‌ಐಡಿಎಲ್ ಸಿಬ್ಬಂದಿಗಳು ತಾಂತ್ರಿಕ ತರಬೇತಿ ಪಡೆದಿದ್ದಾರೆ. ಕೆಆರ್‌ಐಡಿಎಲ್ ಸಿಬ್ಬಂದಿಗಳು ತಾಂತ್ರಿಕ ತರಬೇತಿ ಪಡೆದಿದ್ದಾರೆ. ಕೆಆರ್‌ಐಡಿಎಲ್ ಸಿಬ್ಬಂದಿಗಳು ತಾಂತ್ರಿಕ ತರಬೇತಿ ಪಡೆದಿದ್ದಾರೆ.

Fig: Training program for "KRIDL Engineers"

3. Webinar on "Career Opportunities in Construction, Real Estate, Infrastructure and Engineering Project Management".

Department has organized Webinar on "Career Opportunities in Construction, Real Estate, Infrastructure and Engineering Project Management" in association with National Institute of Construction Management and Research (NICMAR) on 12.11.2021

About the Speaker –

- Dr. Seshadri Sekhar Tirumala - Dean, NICMAR, Hyderabad**
- Dr. Mishra Sarbesh - Dy. Dean, NICMAR, Hyderabad**
- Dr. R. Sathish Kumar - Head ACM**

Topics Covered:

- The objective of the webinars/sessions is to familiarize the students with challenges involved in career/professional development especially in the ever-changing market environment and the post Covid-19 impact.
- Students must be aware of the opportunities available in the current scenario and the skill-sets they need to survive and grow in this dynamic context.

4. Staff Development Program on“Graphics and Video Editing tools”.

Five Days Staff Development program (SDP) on “Graphic and Video Editing Tools” was organized by the Department, Department of Electronics & Communication Engineering and Department of Mechanical Engineering, JSSATE Bengaluru, from 14th March to 18th March 2022.



Fig: Staff Development Program on“Graphics and Video Editing tools”.

5. Webinar on "Report on Career in Techno-Managers and executives for the construction Industry".

Department has organized Webinar on "Report on Career in Techno-Managers and executives for the construction Industry" through virtual mode on 27th April 2022 in association with Ascend School of Construction Business.

About the Speaker - Mr. Sachin.

Topics covered:

- How to create an incredible interface for knowledge seekers who have the potential to emerge out as global icons.
- How to develop consistently, industry-led contemporary programs that incorporate top-notch

skills to the students, faculty and working executives.

- How to establish outstanding research and development practice that fosters creativity into the students and helps them develop design thinking approach.
- How to collaborate with leading organizations in the industry and address.



Fig: Webinar on "Report on Career in Techno-Managers and executives for the construction Industry".

6. Event on "INDUSTRY INSTITUTION INTERACTION".

Industry Institution interaction is a concept that was adopted by the Civil Engineering Association (CEA) and department of civil engineering, to introduce the Industrial organization for the students as a part of academia. This was done in association with Construction Industry Development Academy (CIDA) on 17th of May 2022.

About the Event:

Industry institution interaction is an activity that bridges academics to industries. The exposure and confidence that such communication brings to students is unparalleled. It also seeds the concepts of entrepreneurship in young minds and assures guidance as well as skill enrichment through internships and training sessions.

Good sanitation systems are an integral component contributing to the improvement of human health and thus are a major area of interest in the Civil Engineering Sector. Understanding the importance of good sanitation and the resultant betterment of the citizens' general health and quality of life is fundamental.



Fig: Even on “INDUSTRY INSTITUTION INTERACTION”.

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

1. Project Contest

The Department of Computer Science and Engineering, JSSATEB organized a Project Contest WeGoMAD from 8.7.22 to 9.7.22. Dr.Naveen N C, HOD, Department of Computer Science & Engineering welcomed the speakers with a bouquet. WeGoMAD project contest was conducted for the 6th semester students on web development and applications, computer graphics and visualization, mobile application development. For each subject 2 problem statements were provided in each subject/domain. Students had choose any one problem statement based on their interested domain. Best project was chosen from each domain. E-certificates was provided for all the participants.

JSS Mahavidyapeetha
JSS Academy of Technical Education
 (Affiliated to VTU, Approved by AICTE, Accredited by NBA)
 Bengaluru - 60

Department of Computer Science & Engineering
WEGoMAD

Project Contest
 on
 “Web Technology & its Applications, Mobile Application
 Development and Computer Graphics & Visualizations”

Web Technology and its Applications	Mobile Application Development	Computer Graphics and Visualizations
e-Commerce Website	Google Scholar Website Scraping	Tower of Hanoi
Resume Building Website	Women Safety Application	Postfix to Infix

Timeline: 9:00 AM , 8th July 2022 to 9:00 AM , 9th July 2022
All are Welcome

Dr. Naveen N.C
HOD,CSE
Dr. Bhimasesh Saragoan
Principal

Staff Coordinators
Mrs. Namitha S.J
Mrs. Shruthi P
Mrs. Impana K.P

Fig: project contest on “web development and applications, computer graphics and visualization, mobile application development”

2. Seminar on “Insights on System software and Compiler Applications”

The Department of Computer Science and Engineering, JSSATEB organized a Seminar on “Insights on System software and Compiler Applications “on 4th July 2022. The objective of the seminar was to provide a platform for the students to enhance their technical skills in the field of System software.

Resource Person were Dr Nagaraja G S, Associate Dean & Professor, RVCE, Bengaluru and Dr. Praveena T, Assistant Professor,RVCE, Bengaluru and Prof Sneha M, Assistant Professor,RVCE, Bengaluru.

Dr Nagaraja G S highlighted the following topics during his session.

- Introduction to System Software
- Difference between Application software and System software
- Insights into operating system and its functions
- Scope for the system software developers

Dr Praveen T briefed about the following topics

RISC and CISC architecture

- Applications of these architecture
- How architecture influences the compilers

187 students of third year participated in this seminar and were actively involved. Speaker briefed about the importance of system software and compilers in different sectors.



Fig: Seminar on “Insights on System software and Compiler Applications”

3. Seminar Report on “Data Center and Cloud Computing”

The webinar on “Data Center and Cloud Computing” by Mr. Mahadesha V, Program Director, Center for e-Governance, Govt. of Karnataka was held on 1st July 2022. During the presentation he emphasised the importance of Cloud Computing as this is a vital concept in this digital era where students can understand and explore more on the Cloud Computing. Students could get a glimpse of the cloud services, difference between data center and cloud. He also discussed about Cloud Computing from business perspective. The feedback given by students were very good and they suggested to have more webinars on these technical topics in future. Around 83 students participated in the webinar.



Fig : Seminar Report on “Data Center and Cloud Computing”.

4. Open Day project Exhibition-2022

The Department of Computer Science and Engineering, JSSATE, Bangalore encourages inventions, scientific investigations and research. Open Day project Exhibition-2022 was a platform given to students to showcase their project work. The students are encouraged to uphold their application for development of all sectors of the national economy. Currently there is a need to encourage research and development culture amongst students during the undergraduate training, so that they begin their professional career well prepared with ideas and innovative skills.

Every year the Department celebrates its top students with an exclusive project demonstration developed during 8th Semester. Academicians, Alumni, Industry experts and parents are invited to this special occasion to mark the students’ achievements.

The department of Computer Science & Engineering organized the Open day Project Exhibition 2021-22 on 25/6/2022.

- The Department has invited 4 industry persons, Mr. Manjit, Senior IT architect, IBM India pvt. Ltd., Mr. Ajith Simha, Lead Engineer, Think Bridge, Mr. Manish ,Data Science professional, QS-

Guage, Mr. Vijaya Kulkarni, Vice president, Labor Solutions and 5 alumnae, Mrs. Varsha Bhat, Engineer-1, Cognizant, Ms. Varsha S, Software Engineer, Rockwell Automation, Mr. Shravans S ,Consultant Technology ,Virtusa consultancy services, Mrs. Preethi N, Director , Target corporation and Mr. Prasad M R to evaluate the projects as per the rubrics.

- 62 batches(4 in a batch) participated and each batch were evaluated by two panel members.
- All the team showcased their creative talents through the demonstration of their project work carried out in different areas like IoT, AI,Machine Learning, Block chain, Networking and Image Processing.
- All the final year students, Faculty members and also 1,2,3rd year students witnessed the projects show case.
- All the Nine panel members evaluated the projects as per the rubrics defined. Out of 62 Projects, Top 6 projects were selected.



JSS Mahavidyapeetha
JSS Academy of Technical Education
Bengaluru

Department of Computer Science and Engineering

OPEN DAY PROJECT EXHIBITION 2022

Guest of Honors

							
Mr. Ajith Simha Lead Engineer Thinkbridge	Mr. Manish Data Science Professional QS - IGauge	Mr. Vijay Kulkarni Vice President Labor Solutions	Mrs. Varsha V Bhat Engineer 1 Cognizant	Ms. Varsha S Software Engineer Rockwell Automation	Ms. Shravan S Consultant,Technology Virtusa Consulting Services	Ms. Preethi N Director Target corporation	Mr. Manjit S Sodhi Senior IT Architect IBM India Software Labs

25 - Jun - 2022
10:00 AM Onwards
CSE LABS, A BLOCK

All are Welcome

Coordinators
1. Mrs. Snehalatha N
2. Mrs. Rajeshwari K S

Dr Naveen N C
HOD

Dr Bhimasesn Saragoan
Principal



Fig: Open Day project Exhibition-2022

5. 2nd National Conference on “ Recent Advancements in Computer Engineering (RACE) - 2022”

The Department of Computer Science and Engineering, JSSATE, Bangalore organized the 2nd National Conference on “Recent Advancements in Computer Engineering (RACE) -2022” on 24/06/2022. The Conference aimed to provide a platform to budding researchers to showcase their research findings and to exchange their ideas about the latest technological advancements.

The session chairs for the Conference were Dr. Sagar B M, HOD-ISE, RVCE and Dr. Yogesha C B, Senior Quality Engineer from CISCO.

Dr. Yogesha C B addressed the audience and during his keynote address highlighted the importance of research and of the subjects that are part of Engineering Programme. Sir also gave an insight about the different positions in Industry, their requirements and scope in present day.

The conference accelerated research culture among the participants, and were able to share ideas about current technical advancements.

The conference was convened by Dr. Naveen N. C, HOD and coordinated by Dr. Naidila Sadashiv, Dr. Prasad M R and Ms. Pavitra G S along with the staff members of the Department.

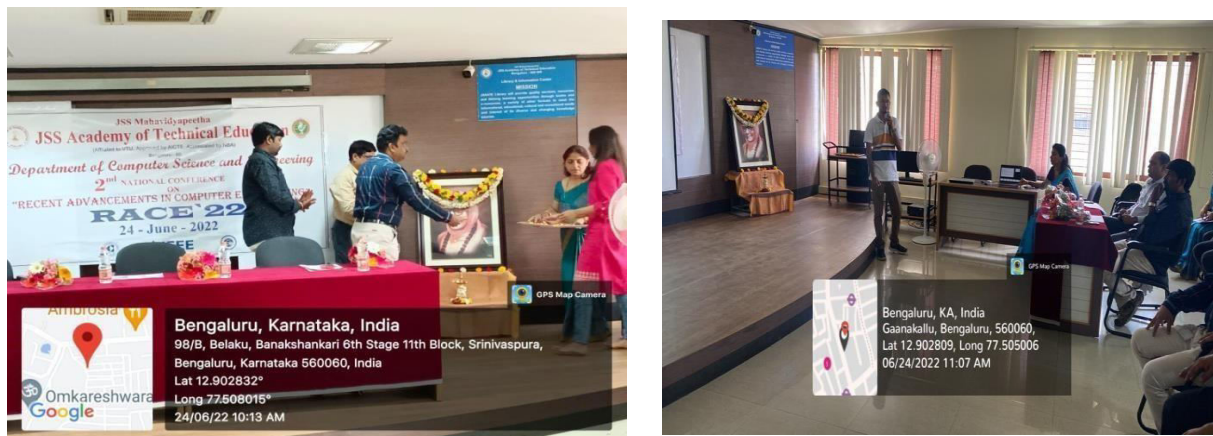


Fig: 2nd National Conference on “ Recent Advancements in Computer Engineering (RACE) -2022”

6. TEN Days Faculty development Program on “Artificial Intelligence and Data Science”

The Department of Computer Science and Engineering, JSSATEB organized a 10 days Faculty development Program on “AI and Data Science” from 20th June to 30th June 2022 on online mode in association with Electronics and ICT Academy, NIT, Warangal.

Chief guest for the function was Mrs. Deepmala Gupta Founder & CEO Cogenerate Solutions Pvt Ltd, Guest of Honour Dr. H R Mahadevaswamy Joint Director, TED, JSS Mahavidyapeetha, Mysuru, Dr. Bhimasen Soragaon Principal JSSATE, Bengaluru graced the occasion.

In recent years, we've seen a resurgence in Artificial Intelligence (AI), and Machine Learning (ML). Machine learning has led to some amazing results, like being able to analyze the medical images and predict diseases on-par with human experts. ML can be embedded into all sorts of different products, and it's used in many industries, like finance, online advertising, medicine, and robotics. It is a widely applicable tool that will benefit the people, working in different industries, R&D organization, etc. Further, the artificial neural network normally used for predictive modelling, adaptive control, etc., where the dataset based training enables it for self-learning and based on this next level predictions can be done from a complex and seemingly unrelated set of information. Generally, the machine learning (ML) approach is considered as the subset of the AI, and the deep learning (DL) is the subset of ML.

Topics that includes Python Essentials, Mathematics for Machine Learning, Evolutionary algorithms, Basic probability theory, Random variables, Probability distributions, Statistical tests for Data Analysis, Probabilistic Inference for Learning, Regression Analysis, Classification, Ensemble Approaches and Optimization were covered during the FDP.

The FDP was coordinated by Mrs Snehalatha N and Mr Rohitaksha K from the Department.

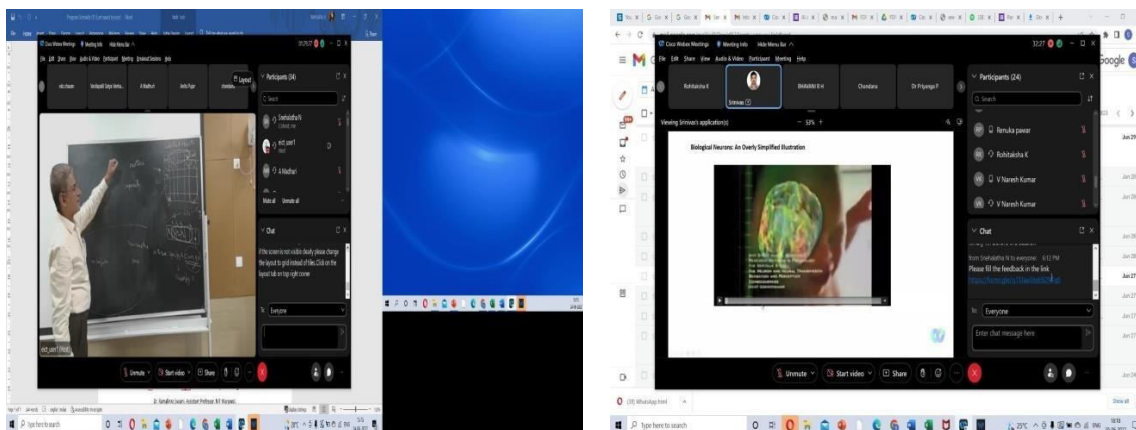


Fig: Faculty development Program on “Artificial Intelligence and Data Science”.

7. ANVESHAN-2022

ANVESHAN-2022 was a two days program was organized on 30th and 31st of May 2022 under the student forum “Anveshan” by the Department of Computer Science & Engineering. The inaugural ceremony commenced with an invocation song followed by lighting of the lamp by dignitaries. Dr. Naveen

N C, Head, Department of CSE formally welcomed all the dignitaries present on the dais and colleagues, students and participants from various colleges. He outlined the objectives of the department student forum-ANVESHAN and urged students to actively participate in co-curricular activities along with acumen to academics.

Dr. Ashoka D. V, Dean Research, addressed the students and mentioned that such events play an important role in the overall development of the students. He spoke about the competition in the higher education and industry sector and urged the students to develop key employability skills like problem solving, effective team work, communication and time management.

After the inaugural function, various technical and non-technical events were conducted on 30th and 31st May 2022. Around **450** students from JSSATE and other colleges participated in the events. Winners of the events were distributed with certificates and cash prize.



Fig: Department cultural event “ANVESHAN-2022”

8. Student development Program on “ Python Coding with application projects and Solutions

The Department of Computer Science & Engineering with Electronics & Communication, Electronics and Instrumentation organized a Student Development Program (SDP) on “ Python Coding with application projects and Solutions” from 12.5.2022 to 16.5.2022. Objective of the program was to enhance the programming knowledge, exposure to real time application projects and solutions among students. To provide a platform for the students to interact with industry persons. To provide awareness on programming in Python and its applications. To understand the need of Python for Data Analysis.

Resource Persons for the SDP were Mr .MohanShamanna, Founder and Mentor , M/s Indoskill, Bengaluru, Mr. Mohammed Azhar Hussain, Co-Founder and Mentor , M/s Indoskill, Bengaluru, Mr. Madhu N, Data Analyst, M/s Techno Genesys, Bengaluru, Mr. Ramakrishna G, Data Analyst, M/s Techno Genesys, Bengaluru, Mr .Yashwanth Kaushik, Data Analyst, M/s Techno Genesys, Bengaluru.

Around 200 students from CSE, ECE and E&I department participated in the Student Development Program. Students were able to acquire the hands-on experience on Python programming and its solutions. Students expressed that the SDP was useful and inline with Industry requirement.

The SDP was convened by Dr. Naveen N C and coordinated by Mrs Snehalatha N and Mrs. Pavitra G S from the Department of Computer Science and Engineering.



Fig: Student development Program on “Python Coding with application projects and Solutions”

9. Faculty development program on “Problem Solving through Programming using C”

The Computer Science and Engineering department had arranged the Faculty Development Programme on “Problem-Solving through Programming in C” from 9th May 2022 to 11th June 2022 for faculty of JSSATE, Bengaluru. During this FDP the resource persons had covered complete concepts of C programming language starting with Introduction to computers, programming languages, basics of C language, decision making, branching & looping statements, arrays, strings, functions, structures and pointers in detail. The lab sessions also held to cover the implementation of above said concepts.

Faculty Development Programme (FDP) aims at equipping teachers with skills and knowledge that are essential for inculcating problem-solving techniques in students using C programming language. This FDP is designed to train and develop faculty to handle programming subjects in future.

Dr. Naveen.N.C, Ms. K.V. Shanthala, Mr. Sharana Basavana Gowda, Mrs. Pooja.H, Mr. Manjunath B Talawar, Mr. Sreenatha M and Mr. Pradeep H K were the resource persons during the FDP.



Fig : Faculty development program on “Problem Solving through Programming using C” From 9th May 2022 to 11th June 2022.

10. Faculty Development program on “Mobile Application Development”

Department had organized the In-house Faculty Development program on “Mobile Application Development”, from 5th - 7th April 2022. Totally 40 participants attended the FDP. The objectives of the FDP were to learn and acquire the art of Android Programming, Configure Android studio to run the applications, Understand and implement Android’s User interface functions.

Mobile application development is the process of creating software applications that run on a mobile device, and a typical mobile application utilizes a network connection to work with remote computing resources. Hence, the mobile development process involves creating installable software bundles (code, binaries, assets, etc.), implementing backend services such as data access with an API, and testing the application on target devices. To develop applications in the latest operating system with practical implementation and begin managing your own mobile applications like a professional. Attendees were provided with instructions to build and manage their new mobile applications.

Ajith Simha, Senior Software Lead Engineer at Thinkbridge Software, Mr. Rahul Hegde, Alumni, UI/UX Engineer, PlayShifu, Bengaluru, Mrs. K S Rajeshwari and Mrs. Swetha Kaddi were the resources persons during the FDP.



Fig: Faculty Development program on “Mobile Application Development”.

11. Student development Program on “Cyber Crime awareness and career opportunities in Cyber Security”

The department organized a Student development Program on “Cyber Crime awareness and career opportunities in Cyber Security” on 7.3.2022.

Gp Capt PA Naidu, Director of ISAC, Clean Exit and Cyberrange, Adjunct Professor, NALSAR university of law, Hyderabad and Mr Shreeshankar, Cybersecurity professional, Former CISO of MNC, senior advisor with ISAC were the resource persons for the event.

The Mr Shreeshankar highlighted the following points:

- Growth in the number of Cyber Crimes in India

- About ISAC
- Impact of digital technology
- Growth in hackers intelligence
- Awareness in cyber crime
- Job opportunities in Cyber security
- Courses that can be taken by students in Cyber security

Around 250 students of 1st semester participated in this student development program and were actively involved. Students benefited from the session to get the awareness on Cyber crime and also the job opportunities in cyber security and the courses that can be taken up in this field.



Fig: Student development Program on “Cyber Crime awareness and career opportunities in Cyber Security”.

12. Webinar on “Management and Entrepreneurship skills”.

A session on Webinar on Management and Entrepreneurship skills was organized on 29th January 2022 from the Department of Computer Science and Engineering. Dr. Naidila Sadashiv, Associate Professor welcomed the speaker Mr. **Karthik Narayana**, Sr. Software Engineer at IQVIA | Public Speaker|Mentor and the audience to the webinar. The webinar was organized to the students in order to provide an insight about start-ups and motivate students to put their thoughts to action and nurture the ideas by hearing from the Entrepreneur Mr. **Karthik Narayana**. He is an Alumni from JSSATEB and a Entrepreneur himself.

He shared his experience during his journey of becoming an Entrepreneur and the factors that lead to it. He spoke about how to understand the problem, define a problem and approaches to find solutions. He spoke about the ESBI model, persona and roles of manager and an Entrepreneur. He spoke about skill

sets required, ventures and lastly about Envision – Wheel of Life and inspired students to do it than just to think of it. Awareness about start-ups was made among students from the Entrepreneur and were motivated them to pursue it. The event was coordinated by Dr Prabhudev Jagadeesh, Dr Naidila Sadashiv and Mr Niranjana C K.

13. Hands on workshop Report on “Node.js”

The Hands-on workshop on “Node.js” by Gayathri Govindarajan, A Lead Consultant, IBM Cloud and Cognitive Software, IBM India Software Labs, Bangalore was held online on 22nd Jan 2022.

Node.js is a platform built on Chrome's JavaScript runtime for easily building fast and scalable network applications. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices. Objectives of workshop was to introduce Node.js and JavaScript which are prerequisites for Node.js. Describe working of Node.js, Create and run a Node.js script from the command line.

Gayathri Govardhan demonstrated developing applications using JavaScript later she explained use of Node Package Manager (NPM) with few Use cases for students.

Students have learnt the installing procedure of the Node.js and how to use to build the applications. The workshop was coordinated by Mrs. K S Rajeshwari from the Department.

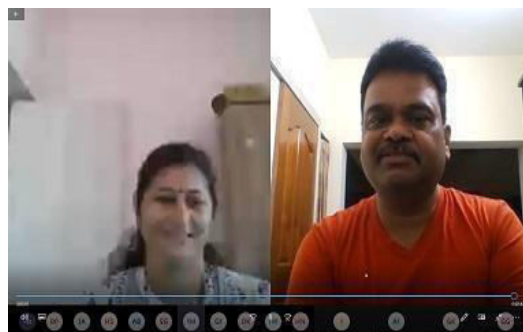
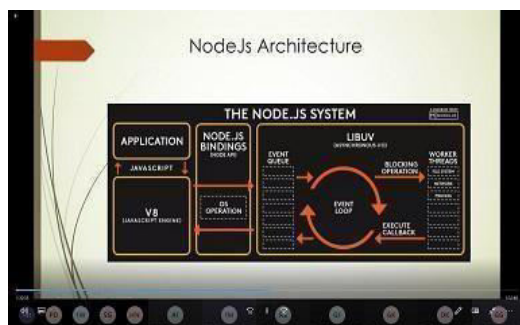


Fig: Hands on workshop Report on “Node.js”

14. Webinar on “Industrial applications of Machine Learning”

The webinar on “Industrial applications of Machine Learning By Mr. Shrinidhi Deshapande, Data Analyst, M/s Maveric Systems, Bangalore was held on 20th January 2022. The resource person has more than 8 years of industrial experience and has worked in several reputed software firms in the area of Data Science and Machine Learning. The webinar was conducted in online mode using Google meet video conferencing tool. He delivered his talk by giving real time examples on machine learning used in medical domain and banking applications. He also briefed about types of machine learning with relevance of algorithms based on the data set. In a nutshell he has enriched students to gain knowledge on the importance of Machine learning concepts in real world applications. Students could get a glimpse of the machine Learning techniques and algorithms with real time examples. The feedback given by students

were very good. And they suggested having more webinars on these technical topics in future also. Around 55 students participated in the webinar. In the future also we expect more participants and plan to conduct a hands-on session and the resource person also has agreed for that.

Event Coordinators are Dr P B Mallikarjuna, MrsBhavani B H and Mr. Sreenatha M

15. Webinar on “Big Data Analytics and its opportunities”

The Department had organized a webinar on “Big Data Analytics and its opportunities” “on 23rd December 2021.

Speaker Mr Rahul Kunal, Lead Data Engineer at m/s Barclays was the resource person during his session. The session was started by Introduction to Big data, 5 V’s of Big data, Phases of a big data project, Hadoop Architecture and Hadoop And ecosystem component. Later NoSQL-concepts and Hbase Architecture was discussed. It was followed by Machine Learning – An Introduction and about Different career choice related to Big Data Analytics and Market trends was highlighted. Speaker Mr. Rahul Kunal ended the session by taking up the queries made by students.

The session ended with vote of Thanks by Mrs Snehalatha N where she expressed her heartfelt thanks to Mr. Rahul Kunal for delivering an informative technical talk on Big Data Analytics. She also thanked HOD, Dr Naveen N C, all the faculty members and students for being part of this session.

16. Webinar on Cyber Security

The Department had organized a webinar on “Cyber Security” on 11-12-2021. Ms. Prachi Sabarad, Associate Software Engineer, M/s Betsol was the resource person. She is alumni of JSS Academy of technical education. When she was a student she actively participated in establish a student club called NCrypt in the Department.

Speaker Ms. Prachi highlighted the following topics during his session.

Phishing Attacks, Case study of how twitter account was hacked, Updating Security Patches, Tools required to start learning cyber security.

100 final year students participated in this webinar and were actively involved. Ms. Prachi started with the importance of cyber security in our daily life. She also told about how one can overcome from phishing attacks. She also took the case study of twitter and how few accounts were hacked. She spoke about the security features to be installed at source to get rid of the security breach.

The session was coordinated by Mr. Rohitaksha K from the Department.

17. Program on “Research Awareness and Capacity Building”.

A Research Awareness and Capacity Building Programme was organized 22nd April 2022, to instil the research methodology and documentation among faculty members and research scholars of JSSATEB. Resource person Dr.D S Guru presented the importance of research in continuous growth of any academicians to uplift the teaching-learning process. Also, he has presented the research methodology and necessity of diversification of thoughts in different dimensions to attain research objectives. In addition to that, he deliberated the skeleton of research article for better publication in reputed journals and indexed conferences.

The session was coordinated by Dr. P B Mallikarjuna from the Department.



Fig: Program on “Research Awareness and Capacity Building”.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Workshops/Technical Talks/ Seminars/ Webinar

1. Innovation and career opportunities in the field of VLSI Design

Mrs. Anu H, Asst. Prof and IETE coordinator introduced the speaker MR Rajanikanth A and welcomed all the participants for the event. Speaker gave overview of VLSI design and increased demand for skilled VLSI engineers at IC design companies over the years. He said that this is due to the huge advances in AI, EV, and smartphone technologies, all of which rely on smart ICs. He also discussed about the various categories of VLSI companies such as, Product companies, IP companies, Foundries, Service companies and EDA companies. Session was concluded with Q &A session. Dr. Thejaswini P, Asst. Prof and IETE coordinator gave vote of thanks. Webinar was organized for 4th Sem, 6th Sem and Faculties of ECE department and was attended by around 100 participants.

Brochure & Schedule

JSS MAHAVIDYAPEETHA
JSS ACADEMY OF TECHNICAL EDUCATION
Affiliated to VTU Belagavi, Approved by AICTE and Accredited by NEA
JSSATE-B, Campus, Dr. Vishnuvardhan Road, Srinivasapura, Bangalore - 560060.

Department of Electronics and Communication Engg
Organizing
Webinar on
"Innovation and career opportunities in the Field of VLSI Design"

By
Rajanikanth A
Analog & Mixed Signal Designer
A senior Industry Professional
In Association with
Establishment of Renewable Smart Grid Laboratory, JSSATE, Bangalore-60.

Dr Mrityunjaya V Latte
Principal, JSSATE, Bangalore.

Dr. Siddesh G K
Asso Prof & HoD,
Dept of ECE , JSS Academy of Technical Education, Bangalore-60

NISP Co-ordinator
Dr. Mallikarjunaswamy S,
Asso Professor

IETE Co-ordinators
Dr. Thejaswini P,
Asst Professor

Mrs. Anu H,
Asst Professor

Date: 18th Aug 2021
Time: 10:00 AM to 12:00 PM
Join webinar in Google meet link:
link: <https://meet.google.com/gee-fcaf-yxn>

Logos: Government of India Innovation Cell, IETE, Institution's Innovation Council, Department of Electronics and Communication Engineering, JSS Academy of Technical Education.

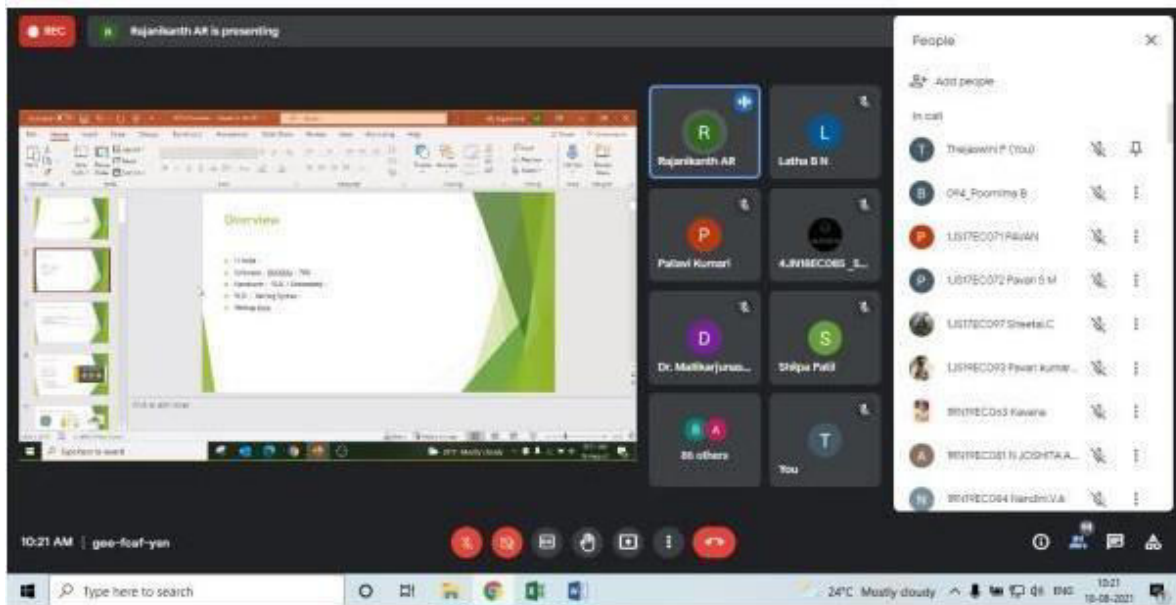


Fig: Photograph of session

Outcome: Participants gained knowledge about what and where the VLSI design concepts can be applied. Participants also got insight into the career opportunities and the companies existing in the VLSI Industry.

2. Nanotechnology

Mrs. Shilpa Patil, Asst. Prof., started the session commemorating 106th jayanthi celebrations of His Holiness Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamiji on 22nd September 2021. Mrs. Latha B N, Asst. Prof.,

welcomed the guests, resource person Dr. P Chinnamuthu, Dr. H R Mahadevaswamy, Joint Director, TED, JSSMVP, Mysuru, Dr. M V Latte, Principal, JSSATEB and all the participants. Dr. Siddesh G K, Head of the Department, introduced the resource person. The speaker started the session by elaborating on what is Nano? what is Nanotechnology? Why, Nanostructure is interesting? He illustrated with examples of butterfly and lotus to explain nanostructures. He moved on to explain the challenges of Nanotechnology considering real life examples of sports and food sectors. He explained the importance and need of nanomaterials in this era.



Fig 1: Nanotechnology

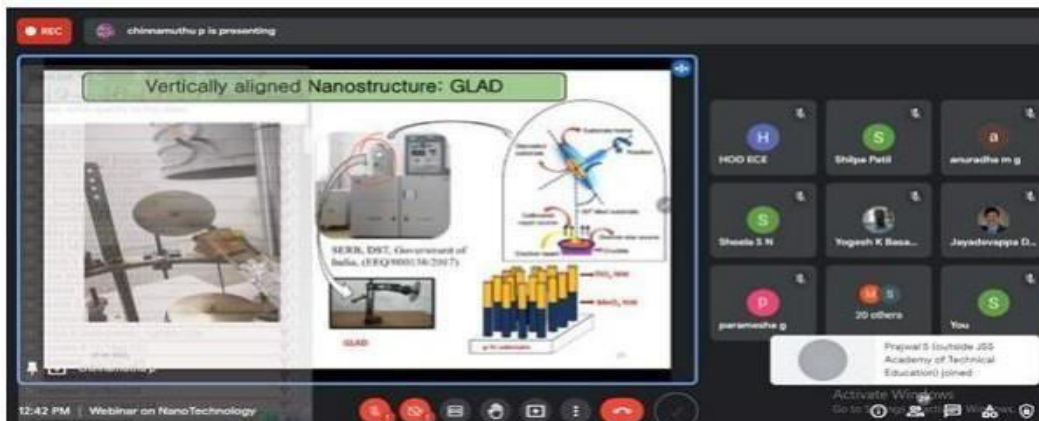


Fig 2: Nanostructures

Speaker also briefed about the fabrication, challenges, applications in the field of Nanotechnology and nanostructures. He also briefed about the manufacturing of nanostructures both in Top down and Bottom up approach along with Oblique Angle Deposition, Glancing Angle Deposition (GLAD) and vertically aligned Nanostructure. At the end he summarized stating that Nanotechnology is multidisciplinary, and it offers exciting Science and Engineering Challenges for years to come. Webinar was organized for faculty members, students and research scholars of ECE Department. Finally, Dr. G Parameshappa, Asst. Prof, proposed vote of thanks.

Outcome: Participants gained deeper insights into nanotechnology, nanostructures, its importance, challenges and applications.

3. Project based circuit design and simulation

“Project based circuit design and simulation” is a training program for the 3rd semester students. The training Course provides a platform for the students to develop their skills in the field of Electronics and digital components through different mini projects. The purpose is to show the live practical examples on how the circuits and components work in real time.



Fig: Understanding and analyzing the circuits with simple diodes and transistor.

Student training program was organized on 14th & 17th March 2022. The training program was started with a welcome note at 10AM on 14th March, 2022. After welcome speech, the training program was started.

The first day of the training program was oriented towards understanding and analyzing the circuits with simple diodes and transistor. The projects covered during the first day are:

Sr. No	Title
1	Plant moisture tester
2	Direction control using potentiometer
3	MOSFET as a switch to control ON – OFF of bulb
4	Automatic door bell ringer

The circuit operation was analyzed and was implemented on bread board and Multi-Sim.

The second day of the training program was oriented towards understanding and analyzing the complex linear circuits. The projects covered during the second day are:

Sr. No	Title
1	Electronic Dice
2	Electronic Piano
3	Resistive touch sensor
4	Mobile Jammer



Fig: Understanding and analyzing the complex linear circuits.

The circuit operation was analyzed and was implemented on bread board and Multi-Sim.

There were 21 participants for the training program from 3rd semester. The feedback was taken and the student have expressed that more such training programs needs to be conducted. The feedback analysis is attached.

4. EMC Design and Testing

A two-day Student Development Program on “EMC Design and Testing” was organized on 11th and 12th of April 2022, by the Departments of ECE and EIE. The SDP was conducted by ‘EMC Engineers’, Bengaluru. A total of 28 students participated in the SDP from both the Departments out of which 14 students were from ECE and 14 were from EIE.



Fig: Principal welcoming the resource person

The SDP was inaugurated on 11th April 2022. Principal Dr. M V Latte chaired the programme and Dr. Bhimsen Soragaon, Vice-Principal and Heads of the Departments from ECE & EIE were on the dais. Dr. D Jayadevappa, HOD, Dept. of EIE presented the welcome speech. Mr. Aravinda Kamath, Founder Director & CTO, EMC Engineers, Bengaluru briefed about the importance of EMC/EMI and also about the workshop. Vice-Principal Dr. Bhimsen Soragaon spoke about the necessity of student development programs in recent days. Principal presented the presidential remarks. Dr. P M Shivakumara Swamy, HOD, ECE delivered the vote of thanks.



Fig: Introductory talk by the resource person

The Electro Magnetic Interference and the Electro Magnetic Compatibility are the most important requirements for any Electrical/Electronic/Electro-Mechanical/Instrumentation Engineers. This program was intended to impart theoretical knowledge about EMI/EMC through visual aids and case studies. The key takes away from the program were,

1. Importance of EMC in electronic design
2. Terminologies used in EMI/EMC
3. Major sources of weakness in circuit design
4. Standards and test configurations
5. Shielding and cabling



Fig: Attendees of the program



Fig: Program session

The program was coordinated by Mrs. Kavitha M, Asst. Professor, Dept. of ECE and Mrs. Bhanumathi K S, Asst. Professor, Dept. of EIE. Following are few of the photographs captured during the program.



Fig: Group photo of the program

5. Artificial intelligence and Machine Learning

Workshop on Artificial intelligence and Machine Learning was conducted by department of ECE, JSS academy of technical education, Bangalore in association with FICE-Vodafone and AI club-ECE from 11.04.2022 to 13.04.2022 with resource person, Mr. Mohammed Ameer.

The resource person explained about basics of Machine learning and artificial intelligence on first day of the workshop. He introduced the learners to field of artificial intelligence and machine learning. The resource person first started with the basics of python and then continued with the basics of machine learning which involved various type data mining techniques like Market basket analysis. He introduced the learners to the history, need and importance of machine learning, explained the reason for boom AI and ML in recent past, scope of this field, career building opportunities. The learners got motivated to start dive into the ocean of knowledge of AI and ML. Overall first day of workshop was an introduction, warmup and motivation session which had cheered the learners to start getting involved in the field of AI and ML field.

On second day, the learners started to know how exactly few of the algorithms worked in backend by using various tools like Excel, Desmos and with help of few datasets from Kaggle. The algorithms explored were Simple Linear Regression and Logistic Regression, which were later implemented in Google Collab using Python. The resource person also explained the use case of this algorithm and showed us the real-world implementation examples.

On third day, the mall customer dataset introduced the learners to the use case of K Means Clustering algorithm, which was used here for business purpose to attract customers by clustering them into different groups and giving them special offers based on their previous shopping data and monthly income. This business case study made learners excited to explore the field of data exploration, data wrangling. The next case study was supervised classification algorithm KNN for classification of underweight and overweighted individual dataset. There were refreshments provided by the college to encourage the workshop. Overall, the workshop provided a great opportunity for learners to explore the field of AI and ML with the light of knowledge of the resource person, Mr. Mohammed Ameer. We thank our college, the coordinators of this program and resource person for providing an opportunity to explore the field of AI and ML.

6. Python Coding with Application Projects and Solutions

The Department of Computer Science & Engineering, Electronics & Communication, Electronics and Instrumentation, JSSATEB organized a Student Development Program on “Python Coding with application projects and Solutions” from 12.5.2022 to 16.5.2022

The Inauguration of the Student Development Program was held on 12.5.2022 at 9.30 AM with Invocation Song by Ms. Chaitra H V and Team followed by lightning the lamp by dignitaries.



Fig: Inauguration of the Student Development Program

The Welcome speech was addressed by Dr. Mahesh Kumar, Associate Professor, Dept. of E&I. Dr. Mallikarjuna Swamy, Associate Professor, Dept. of ECE briefed about the Student Development Program. The introduction of the Guests was done by Dr. Naveen N C, HOD, Dept. of CSE and Dr. Thejaswini P, Assistant Professor, Dept. of ECE respectively.

Mr. Mohan Shamanna, Founder and Mentor, M/s Indoskill, Bengaluru and Mr. Mohammed Azhar Hussain, Co-Founder and Mentor, M/s Indoskill, Bengaluru were the Guests of the SDP.



Fig: Guest addressed the gathering

Dr. Jayadevappa D, HOD, Dept. of E&I addressed the gathering. Presidential address was done by Dr. Bhimasen Soragoan, Principal, JSSATE, Bengaluru. Vote of thanks was proposed by Dr. Shivakumarswamy P M, HOD, Dept. of ECE

For all the sessions, attendance were taken and at the end of the program feedback was taken.



Fig: valedictory

7. Sensors in real world

Objective:

Session 1 (12th May 2022) - To discuss different types of Sensors and its applications in the real world.

Session 2 (19th May 2022) - Hands on with Raspberry Pi and sensors.

The SDP was divided into two sessions. The sessions were addressed by our esteemed resource person **Mr. Prasanth Iyer** and co-ordinated by our respectable faculty members Dr. Poornima N, Mrs. Shubha B, Mrs. Kavitha H.S, Mrs. Gouri S Katageri and Mrs. Shilpa Patil. The sessions were mainly focused on Sensors and its applications in real world along with hands-on on Raspberry Pi Model B.

SESSION 1 (Held on 12th May,2022):

In session 1, students were introduced to different kinds of sensors and their communication interfaces. The application of sensors in each domain of our life is incorporated so effortlessly that it's impossible to imagine our lives without it. Whether it is the field of agriculture, automobiles, medicine, industrial, security and home automation and personal health, sensors find its applications everywhere.

The resource person discussed in detail about different types of sensors and their working principles used in the field of technology and embedded systems, such as, temperature sensor, proximity sensor, accelerometer, IR sensor, pressure sensor, light sensor, ultrasonic sensor, smoke, gas and alcohol sensor, touch sensor, color sensor, humidity sensor, position sensor, magnetic sensor, microphone, tilt sensor, flow and level sensor, PIR sensor, touch sensor, strain and weight sensor. Application of sensors for home automation, automobiles, auto pilot system in air craft and many other real time applications were explained with examples. Sensors are always connected to either the controllers or the processors. Thus, the difference between a microcontroller and microprocessor were discussed briefly along with their examples and different manufacturing companies.



Fig: Resource person with students during the session.

Communication protocols, like UART, I2C, USB, SPI and their uses in Microcontroller and sensors were also discussed. Need and use of wireless interfaces such as Wi-Fi, Bluetooth, Z-wave, LoRa and others were also emphasized and discussed for communication. Need and meaning of Calibration for sensor devices and its techniques, choice of a sensor and its selectivity were also discussed and emphasized.

SESSION 2 (Held on 19th May,2022):

The second session described the practical approach of sensors and their connectivity to different interfaces. The real time exposure of Raspberry Pi with sensors was demonstrated. The hands-on session with sensors was industry oriented. The Raspberry Pi Model B was used in the session. The basic design and hardware architecture of Raspberry Pi was briefed in the session. The Raspberry Pi is a

high performing single-board computer which has recently become very popular. In the session the algorithms were coded in python environment which is the default programming environment for Raspberry Pi. The Raspberry Pi is controlled by a modified version of Debian Linux optimized for the ARM architecture. The ARM architecture was also explained in detail in this session.

The display contains a Graphical User Interface (GUI) which provides various fields for data entry via an onscreen keyboard. With software like putty and Arduino IDE, real time coding was carried out with the sensors. The sensors were connected to laptops through Arduino IDE software. Step-by-step instructions for the complete coding activity were given. The resource person also shared his insights with his advanced coding skills and challenges, to help the students to adapt and implement theory to practicals. Communication to Raspberry Pi was also done using external SD card. In this session, several queries of students were answered and resolved.



Fig: Resource person explaining programming using IDE software.

In the session, the students were also exposed to MEMS which stands for Micro-Electro Mechanical Systems. MEMS is a miniature machine that has both mechanical and electronic components. The physical dimension of a MEMS device can range from several millimeters to less than one micrometer, a dimension many times smaller than the width of a human hair. Construction of MEMS and its importance in the field of Nanotechnology was also explained. The heart of any MEMS device is micro sensor and micro actuator along with microprocessor units for data processing. MEMS is a chip-based technology where sensors are composed of a suspended mass between a pair of capacitive plates. When the sensor is tilted, a difference in electrical potential is created by this suspended mass. The created difference is then measured as a change in capacitance. The working principle of MEMS was also briefed.

Outcome: Participants gained deeper insights about sensors, MEMS devices and their applications along with hands-on and programming using Raspberry Pi.

8. Secure Systems Engineering.

Objective: Students get to learn and comprehend the role of IoT in day-to-day life and will understand IoT infrastructure consisting of edge, Fog and cloud devices. This session provides understanding of IoT building blocks, applications and case studies. With the opportunity to explore and understand security solution in IoT space, the session unfolds the security challenges and issues in handheld devices.

Report: Brief report on the respective session held

In recent years, with large data explosion, need for high performance computing systems are on an exponential rise. IoT and cloud-based architectures with powerful computing systems at the back end are crucial to meet the growing demand of data and compute intensive applications. Security of this ecosystem depends on the security of edge, fog, cloud and underlying system infrastructure. We explore how these devices impact our life and the challenges of the same from a security point of view. Workshop also provides a platform for formal as well as informal interaction between participants and resource persons to discuss about possible avenues of collaborations, internship and career opportunities in IITs.



Fig: snapshots of event

Workshop Contents

- Role of IoT, Edge and Cloud devices in the modern world. IoT Security Challenges and Countermeasures.
- Security Challenges in Embedded Edge Devices.

- Security Challenges in handheld Devices. Discussion on career opportunities and higher studies options in IITs.

Outcome: Participants gained deeper insights of IoT, its applications, the role of IoT in day-to-day life. Participants got an opportunity of exploring and understanding of security solutions in IoT space.

9. Image Processing Applications on FPGA

“Image Processing Applications on FPGA” is a student development program for the 6th semester students. The workshop provides a platform for the students to develop their skills in the field of developing image processing applications on FPGA through Hands on sessions. The purpose is to show the practical examples on how the Image processing applications are built in real time.

Student training program was organized on 4th & 5th June 2022. The SDP / Workshop was started with a welcome note at 9.30AM on 4th June, 2022. After welcome speech, the training program was started.

The first day of the training program was oriented towards understanding and analyzing the ASIC Design Flow, Memory on board, Clock etc. The following topics were covered during the first day:

- Introduction to VLSI and design flow of ASIC
- Introduction to VHDL and Verilog
- Data types of VHDL and Verilog 2001
- Behavioral, Structural, Gate level and data flow description styles with examples
- Procedures, functions and tasks in Verilog
- FPGA design flow and Architecture of Spartan development boards
- Design finite state machines using multiple encoding schemes
- Design of FIR Filter
- Design of cryptography application
- Traffic Light Controller using FPGA
- Sequence detector using FSM
- Digital Clock using FPGA
- Introduction to IP cores
- Design of ROM, RAM, SRAM, DDR2 and FIFO
- Design of All trigonometry functions using IP cores and Verifications on FPGA
- Design of 32bits ALU, Adder, Subtractor, Multiplier and logical operations using IP Core and testing on FPGA
- Design of All trigonometry functions using IP cores and Verifications on FPGA
- Design of 32bits ALU, Adder, Subtractor, Multiplier and logical operations using IP Core and testing on FPGA



Fig: Understanding and analyzing the ASIC Design Flow, Memory on board, Clock.

The second day of the training program was oriented towards understanding, analyzing and building the image processing applications. The projects covered during the second day are:

- Introduction to advanced Xilinx Vivado Design suite software tool and its benefits
- Interfacing of VIO and ILA with examples
- Introduction to Xilinx System Generator (XSG)
- Image processing applications using Xilinx and system generator and Implementation on FPGA
- Image Segmentation using XSG and Matlab Spartan 6 FPGA
- Image Enhancement using XSG and Matlab on Spartan 6 FPGA
- Image Edge detection using canny, Sobel, Prewit and others using XSG and Matlab on Zynq 7000 FPGA development board
- Image Fusion using XSG and Matlab Spartan 6 FPGA
- Feature extraction by DWT using XSG and Matlab Spartan 6 FPGA
- All mathematical equations using XSG and Matlab Spartan 6 FPGA



Fig: Understanding, analyzing and building the image processing applications.

The circuit operations were analyzed and were implemented on Xilinx 14.7 and MATLAB.

There were 37 participants for the training program from 6th semester. The feedback was taken and the student have expressed that more such hands on workshops needs to be conducted. The feedback analysis is attached.

We thank our beloved Principal, Dr. Bhimsen Soragaon for his moral support. We also thank our beloved HOD, Dr. P.M. Shivakumara Swamy, for his support for the SDP / Workshop program.

10. Journey to the Planet Mars

Preamble:

As a part of Silver Jubilee Celebration of the Institute, Department of Electronics and Communication Engineering conducted a technical talk on “Journey to the planet Mars” for 4th semester students.

Dr. P M Shivakumara Swamy, HOD, ECE welcomed & Mrs Kavitha M introduced the guest.

Dr. T N Suresh Kumar, Senior Space Scientist from ISRO begun the talk remembering his guru Dr A P J Abdul Kalam followed with the description on the Evolution of Journey to space. The ambition of human beings to fly like a bird is a pathway for the space journey. He enlightened on the invention of parachute, sky diving, supersonic flight, space station, journey to Mars.

In the talk he also, briefed about the layers of atmosphere, suitable atmosphere for space flights, requirements for the space traveler and zero gravity flyer, awareness on the design of space suit. The few challenges mentioned on Journey to Mars were distance of travel from Earth to Mars, atmosphere, space craft, fuel management, astronaut health, communication among astronauts. Dr. T N Suresh Kumar shared his achievements, adventures, experiences, journey around the world through a short video. His experience on Zero gravity flight Aero Lab video was also played.

Dr Ravikumar K P expressed heartfelt thanks to Dr. T N Suresh Kumar.



Fig: Address by the Resource Person



Fig: Group photo of the event

11. Student Development Programme

The workshop was inaugurated by HoD, Electronics and Communication Engineering, Dr. P M Shivakumaraswamy. Mrs. Shubha B, introduced the Resource Person to the gathering and HoD welcomed the Resource person with a Bouquet. HoD, informed the students about the importance of the organizing workshop on recent technology to the students. Mr. Syed Md Asadur Rahman, resource person started session 1 on day 1(22nd July 2022) with brief introduction to IoT and its applications. He explained the basics of IoT.

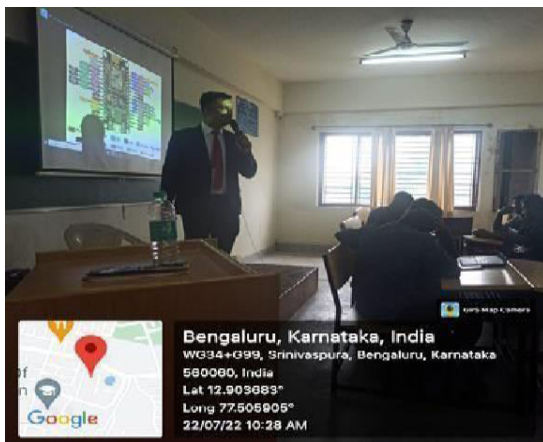


Fig: Explained the basics of IoT.

Resource person discussed arduino UNO board. Participants were asked to make groups of 4 students and each group were provided with a kit comprising of arduino UNO, blue tooth, sensors, LEDs.



Fig: Hands-on session

The Hands-on session started with the Resource Person explaining the procedure to install IDE in Laptops. He also described the use of breadboard for connecting arduino and other devices. The basic programming fundamentals required to program nodeMCU were discussed. The participants were exposed practically by implementing the following projects.

1. Simple LED Program for NodeMCU
2. Integrating Sensors & Reading Environmental Physical Values.
3. Control Devices using Localhost Web Server for Home Automation.



Fig: Brief introduction on cloud computing

On Day 2(23rd July 2022), Session was started with brief introduction on cloud computing. The resource person described the communication between the devices connected to the internet. Participants were

made to connect devices to internet, send data to cloud and receive data from cloud. Participants implemented the following projects for practical experience on IoT.

1. Send Voltage & Analog Data on Cloud Server
2. Use NodeMCU to Upload data from Environmental Sensors to Cloud Server.
3. Control Electronic Devices from anywhere across the world using Internet & Mobile App



Fig: The participation certificate is distributed to students

The Workshop concluded by Valedictory function. Dr. Poornima N, Associate Professor delivered Vote of Thanks. The participation certificate was distributed to students. The resource person invited participants to share their ideas and certificate of excellence were distributed to students with best ideas.



Fig: Valedictory function

Industrial visits

Industry Visit at U R Rao Satellite Centre Bengaluru (ISRO)

Objective of Industrial Visit

The Objective was to encourage & motivate students for building their carrier in scientific and research activities related to space and embedded software. This will surely benefit to students in space domain and shape student's professional career path.

To gain knowledge about the ISRO space industry and the satellites launched by ISRO and learn about ongoing projects.

Department of Electronics and Communication Engineering, JSSATE, organized an industrial visit on 9th June, 2022, for 6th semester ECE and CSE students, to ISRO - U R RAO Satellite Centre, Bangalore. The students, along with faculty members from the ECE Department Dr. H S Arvind, Suguna G C left the college at 11.30 am by the college bus, and reached the Satellite Centre at 1.00 pm. After the security checks, we had lunch at the ISRO canteen.



Fig: snapshots of visit

Brief Introduction about the satellite centre:

U R Rao Satellite Centre (URSC), Bengaluru, formerly known as ISRO Satellite Centre (ISAC), is the lead center for building satellites and developing associated satellite technologies. These spacecrafts are used for providing applications to various users, in the areas of Communication, Navigation, Meteorology, Remote Sensing, Space Science and Interplanetary Explorations. The Centre is also pursuing the development of advanced technologies for future missions. URSC is housed with state-of-the-art facilities for building satellites on end-to-end basis.

Around 2pm, we received the visitor passes and entered the satellite centre building.

At the building, we were received by one of the scientists of ISRO Mr. Srinivasan, who took us to the conference room, to first deliver a lecture on ISRO and its contributions to space technology. He

introduced us to the 'forefathers' of ISRO, and their humungous contribution to Indian space technology which makes us stand tall among the top space organizations. The students were overwhelmed to see the representational models of various satellites - from the first ever satellite of India 'Aryabhata', to 'Chandrayan-1', INSAT, ROHINI, BASKARA, IRS, SROSS, APPLE etc. The exhibits at the Satellite Centre provided us with insights about their future vision of Chandrayan-2, manned satellites and use of recent technologies to harness space resources.

Chandrayaan-1:

Chandrayaan-1, India's first mission to Moon, was launched successfully on October 22, 2008 from SDSC SHAR, Sriharikota. The spacecraft was orbiting around the Moon at a height of 100 km from the lunar surface for chemical, mineralogical and photo-geologic mapping of the Moon. The spacecraft carried 11 scientific instruments built in India, USA, UK, Germany, Sweden and Bulgaria. After the successful completion of all the major mission objectives, the orbit has been raised to 200 km during May 2009. The satellite made more than 3400 orbits around the moon and the mission was concluded when the communication with the spacecraft was lost on August 29, 2009.

After discussing about the major missions of ISRO, we were taken to the satellite assembly facility. There were mainly 3 satellites which were being assembled which includes a micro satellite (to be launched next month), a satellite for studying the oceans.

Then, we visited the exhibition room where we learnt about the various satellites and achievements of ISRO since it was started.

Later there was a questionnaire by the students to the Scientist himself, where various aspects of physics, space research, existing technologies, futuristic approach etc. were discussed. The Scientist also enlightened the students about the job opportunities and the numerous benefits of working in this well-established sector of the country. Indeed, it was a wonderful experience, inspiring young minds to achieve and reach great heights invoking the spirit of enthusiasm.

Parent Teachers meeting

Agenda:

1. Department Progress- Faculty and student achievement.
2. Activities for students, Placement and results.
3. Question and Answer session.

Proceedings of the Parent Teacher Meeting held on 05-03-2022 at 10:00PM.

Sub: Parent Teacher Meeting was conducted to discuss about the department progress, Activities conducted for students, Student Performance and attendance in their internal assessment and Placement Activities.

Members Present:

Teaching and Non-Teaching faculty from the department of Electronics and Communication Engineering.

Preamble:

Electronics and Communication Engineering Department was started in the year 1997, with an intake of 60 for UG Program. The Present intake for B.E. in Electronics and Communication Engineering is 180. Department is accredited by National Board of Accreditation (NBA) for the duration 2020-21 to 2022-2023.

The Post Graduate (M. Tech in VLSI Design & Embedded System) was started in the year 2006 with an intake of 18.

The Department is recognized as a research centre by Visvesvaraya Technological University, Belagavi from July 2014.

PTMs are conducted to inform stake holders about academic activities, student achievements and events organized in the institution. PTM is a channel to deliberate Department Vision, Mission and importance of outcome-based education to stake holders which is an essential requirement for Accreditation Process. Department of Electronics and Communication Engineering conducts two PTMs in an academic year, one meeting in each semester.

This meeting was conducted to inform stakeholders (Parents/Students) about various activities conducted to students under different student forums like IEEE, IETE and ISTE, Student Performance and attendance in their internal assessment and Placement Activities. This meeting was conducted to deliberate the advantages of outcome-based education to stake holders. Mrs. Anuradha M.G, Assistant Professor, Department of Electronics and Communication Engg., welcomed the gathering. Dr. P.M. Shivakumara Swamy, HoD and Professor, Department of Electronics and Communication Engg, addressed the Parents/ Students of First and Second Year Electronics and Communication Engineering Department on 5th March 2022.



Fig: snapshots of the event

The key points / highlights of the discussion are

1. Department Progress

- **HOD, ECE** informed Parents that Department conducts PTMs once in a semester to provide information about the activities conducted for students, students and Faculty achievements.
- HoD briefed about department achievements. He informed that Department has sanctioned projects from VGST and VTU grants. He mentioned that students are actively involved in funded projects.
- HoD highlighted that four final year projects were funded by KSCST under 44th series Student Project Programme.
- HOD briefed about the MOU'S of the department with the companies where the students get opportunity to carry out their internships. The companies also provide technical talks and workshops which are useful for bridging the gap between the industry and academia.
- HOD briefed about the placement of last 3 years and informed that over 95% of the eligible candidates are placed. He informed that currently 68 students who are in 7th semester are placed and further the placement drive will continue in 8th semester.
- HoD briefed about previous examination results and requested parents to encourage their wards to concentrate on academics as good academic record creates good placement opportunities.

2. Activities and Placement

- **Mrs Anuradha.M.G**, Asst. Prof and Placement coordinator of the department informed Parents about the companies visiting the college. She highlighted that companies expect student's academic record should be good with no arrears and hence requested the parents to encourage their ward to concentrate on the academics. She informed parents that the highest package offered is 10 LPA and the average package is 4.5 LPA.
- **Dr.Thejaswini. P**, Asst. Prof. and IETE coordinator of the department briefed about the activities conducted under IETE. She explained that the Forum conducts technical activities like workshops, guest lectures which is used to cover the gap between the industry and academia. Non-technical activities will be organized under the forum "Atharva" a student forum under IETE which helps in overall development of the student.

3. Question and Answer Session

- Parents enquired about the training programs and MOU's of the Department to which HOD informed about the opportunities of the training program and internships provided by the companies.
- Parents enquired about the soft skill training and the procedure of the placement to which HOD and Mrs. Anuradha M.G briefed that the placement training would start after the 5th semester exams and also briefed about the placement procedure. Also Mrs. Anuradha informed parents that highest salary package offered is 10 Lakhs Per Annum by M/S LIDO.
- Parents were very happy about the teaching learning process and the hospitality.

Finally, Mrs. Anuradha M.G, Assistant Professor, Department of ECE delivered Vote of Thanks. Around 46 Parents, all teaching and non-teaching Faculty attended meeting.

DEPT. OF ELECTRONICS & INSTRUMENTATION ENGG.

Industry Visits

1. Shreyas Paper Mill Pvt. Ltd.

The Department has organized an Industrial visit to Shreyas Paper Mill Pvt. Ltd., Dandeli from 22nd to 24th Nov. 2021. In this industry, one of the raw materials used was waste papers for the production of the paper. This industry is completely modernized with advanced automation equipments. This visit helps our students to understand various sensors and automation systems which are used in various levels of paper manufacturing process. There are 34 students of 7th semester have visited the industry and they are accompanied by faculty members Mr. P. Praveen and Ms. Kavya N. The following picture depicts the front view of the paper mill.



Fig: Front view of the paper mill.

2. Old Goa Oils & Foods Private Limited

The Department has organized an industrial visit to Old Goa Oils & Foods Pvt. Ltd. from 2nd -4th Dec. 2021. In this industry, the extraction of oil has been done from raw materials and this process is completely automated till the packaging. Our students have understood the role of sensors and instrumentation systems in packaging process. There are 31 students from 5th semester have visited and accompanied by faculty members Mr. P Praveen and Mrs. Sowmya M S.



Fig: Front view of Oil Industry

Workshops/Technical Talks/ Seminars

1. Seminar on Successful Career Planning, Higher Education & Technical Profile Building

A seminar on “Successful Career Planning, Higher Education & Technical Profile Building” was organized by the Department of Electronics and Instrumentation Engineering on 26th Nov. 2021 by Mr. Pranjali Mishra, Associate Director Business Development, Career Labs EdTech., Bengaluru. The objective of this seminar was to create awareness about having a successful career plan, importance of higher education & technical profile building. The seminar was attended by 5th semester students & was organized by Mrs. Nagarathna N, Asst. Professor, Dept. of E&IE.



Fig: Speakers addressing the students.

2. Two days training program on Advance Software Resources for Digital Library Management and Library Automation.

Raja Rammohun Roy Library Foundation, Ministry of Culture, Govt. of India sanctioned an amount of Rs, 2.5 lakh to organize two days training program on “Advance Software Resources for Digital Library

Management and Library Automation” from 13th – 14th Dec. 2021. D. Maheshkumar was the convener of the workshop and Harshitha S and Sowmya M S coordinated the event.



Fig: Inauguration of the event



Fig: Guests addressing the gathering

3. Invited talk on Avenues for Electronics & Instrumentation Graduates

To educate E&IE students about the opportunities available in the outside world, an invited talk was arranged on 14.12.2021. The speaker was Mr. Sanjeev Prasad Shastry who was an Alumni of E&IE department. He also did MS from EureCom, University, France and currently working as an infrastructure Engineer at Lowes Services India Pvt. Ltd., Bengaluru.

This talk was organized for 3rd, 5th and 7th semester students E&IE students. In this talk he extensively explained his experiences after Engineering and Masters. He also discussed the opportunities available for E&IE graduates and to equip with knowledge and skill to face the technical world outside. His talk was very informative and motivated the students. Queries with regard to higher studies and other job related issues were also answered. Total 78 students attended the talk. Mrs. Bhanumathi K S, Asst. Professor, Dept. of E&IE has organized this talk.

4. Webinar on Career opportunities after Gate Exam

A webinar on “Career opportunities after Gate Exam” was organized by the Department of Electronics

and Instrumentation Engineering on the 22nd of January 2022 by Mr. Sanjeev Kumar, Sr. Manager, Academic Relation, The GATE Academy Pvt. Ltd., Bengaluru. The objective of this webinar was to introduce students to how important is the Graduate Aptitude Test in Engineering (GATE) examination for future prospects. This webinar was attended by 3rd, 5th & 7th-semester students of Electronics & Instrumentation Engineering. This program was organized and coordinated by Mrs. Nagarathna N, Asst. Prof. Dept. of E&IE.

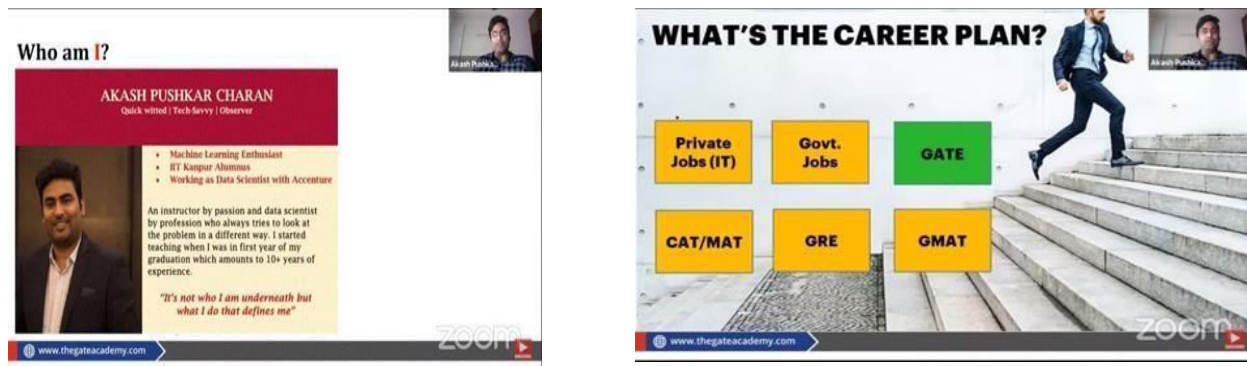


Fig: Speaker delivering the talk through online & Career plan.

7. Technical Talk on Necessity of Calibration in Industries

The Department of Electronics and Instrumentation Engineering, JSSATE, Bengaluru, organized a Technical Talk on "Necessity of Calibration in Industries" by Mr. Vishnu Kulkarni, Alumni, Calibration & Automation Engineer, Vi Solutions Pvt. Ltd., Bengaluru on 01.02.2022. The speaker explained the students about the needs and necessities of Calibration in Industries. The students were educated about the very basics properties of instruments along with sharing his experiences.

The speaker explained about the accreditation process involved in calibration by NABL. He mentioned a few avenues for the students if they are interested in pursuing their career in this area. He guided the students to undergo some training in Automation. Lastly, he demonstrated the calibration process for regulated DC power supply.

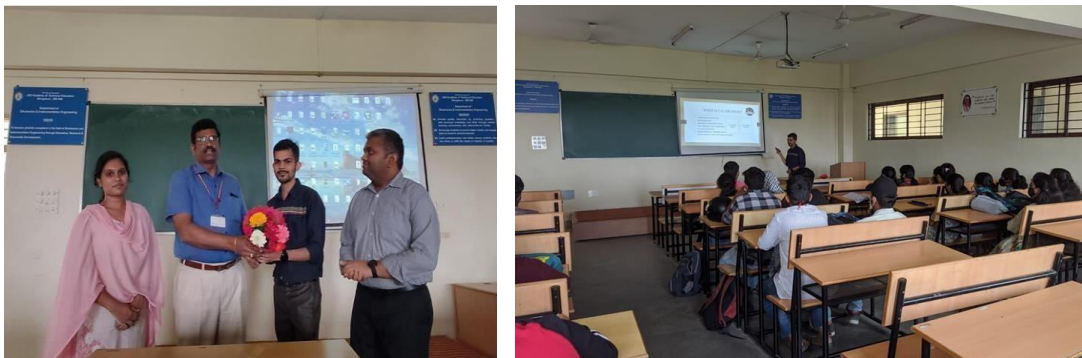


Fig : HOD welcomes the speaker & Speaker addressing the students

9. Invited talk on Creation of Healthy and Caring Relationship.

It is important for the younger generation of today's world to know about the creation of healthy and caring relationships. In this context an invited talk was organized on 09.04.2022 for first year chemistry cycle students. The Resource person was Ms. Mamtha M R, Consultant, Impact evaluation, Sattva Agency. She had worked on various government and UNICEF projects. Her expertise are Capacity Building, Counseling and Therapy, Child rights and advocacy and Program management. The topics covered in the talk were,

- Building communication skills (Listening and speaking)
- Friends and friendship – education
- The value of relationships and communication
- Relationships for Better or worsening of life
- Understanding of basic instincts of life (more than a biology)
- Changing health behaviors through social engineering,

About One hundred and thirty three students had attended the talk. Mrs. Bhanumathi K S, Asst. Professor, Dept. of E&IE had organized this talk. The following pictures were captured during this invited talk.



Fig: Principal inviting the speaker

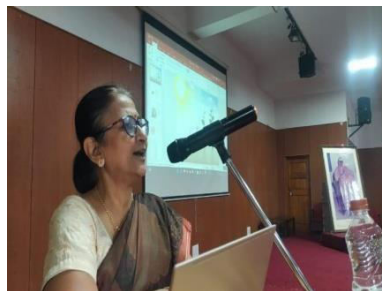


Fig: The speaker addressing the students



Fig: Students' interaction with the speaker

10. Student Development Program on EMC Design and Testing

Student Development Program on "EMC Design and Testing" was organized on 11th and 12th of April 2022,

by the Departments of ECE and EIE. The SDP was conducted by EMC Engineers, Bengaluru. A total of 28 students participated in the SDP from both the Departments out of which 14 students were from ECE and 14 were from EIE.

This program was intended to impart theoretical knowledge about EMI/EMC through visual aids and case studies. The key takeaways from the program were,

- Importance of EMC in electronic design
- Terminologies used in EMI/EMC
- Major sources of weakness in circuit design
- Standards and test configurations
- Shielding and cabling

The program was coordinated by Mrs. Kavitha M, Asst. Professor, Dept. of ECE and Mrs. Bhanumathi K S, Asst. Professor, Dept. of EIE. Following are a few of the photographs captured during the program.



Fig: Introductory talk by the resource person



Fig: Participants in the program



Fig: Group photo of the program

11. Student Development Program on Python Coding with application projects and Solutions

The Department of Computer Science & Engineering, Electronics & Communication, Electronics and Instrumentation, JSSATEB organized a Student development Program on Python Coding with application projects and Solutions from 12th – 16th May 2022.



Fig: Inauguration of the SDP.

12. Technical Fest-ANANTHAM-2022

The Department of Electronics & Instrumentation Engineering, JSSATE, Bengaluru had organized a two days' Technical Fest **ANANTHAM-2022**, on 2nd and 3rd of June, 2022. The Chief Guest for the inauguration of the technical fest was **Dr. S K Murthy, Director of Intellectual Property, Intel, India**. The inaugural function was graced by the principal Dr. Bhimasen Soragaon, Dr. D Jayadevappa, HoD, Mrs. Harshitha S, Asst. Prof. & Fest Coordinator, Faculty, Staff and students.

The fest incorporated a sum of 28 technical and non-technical events like Blind Programming, Fast & Blind typing, Technical Quiz, Tech Debate, Paper Presentation, Logo Quiz, Shark Tank (Ideathon), Circuit Debugging, Program Debugging, Tech Spell Bee, Mini Cricket, Face Painting, 4-Pics 1-Word, Chess, Basketball (3x3), Treasure Hunt, Minute To Win It, Beg Borrow Steal, Game of Shows, Mobile Photography, Cooking without fire, Group dance, Beat Boxing, Mock IPL, Solo Dance, CSGO, Carrom, Valorant.

Students from different colleges like RNSIT, DBIT, SJBIT, Chitrakala Parishath, BNMIT, BMSE, ASC Degree College and so on effectively participated in the events enrolled. There were more than **five hundred** participants from various institutes and also from JSSATEB.



Fig: Felicitation of chief guest.



Fig: Flash Mob Performance by students in front of Academic Block-B



Fig: Face Painting, Participants playing a Chess & Mini cricket event



Fig: Shark tank Event



Fig: Basketball Event

The cultural events started with the team “RAAGA”. They gave a thrilling performance with some mild flute music, tabla, vocals, beat boxing and few melodious songs. The students of the 8thsem & 6th sem also gave an enthralling entertainment by dancing to various popular songs. The two days’ technical fest ANANTHAM was successfully accomplished with the support of the management, faculty, staff and all the students of the Department.

13. Student Development Program on Image Processing and Machine Learning using LabVIEW

A Student Development Program on “Image Processing and Machine Learning using LabVIEW” was organized by the Department of Electronics and Instrumentation Engineering from 21st to 23rd June 2022. The objective of the SDP was to facilitate the Hands-on experience on LabVIEW software in the field of

Image Processing and Machine Learning and to train students to acquire skills on the LabVIEW platform. In the SDP, the students were given the introduction to the LabVIEW, various modules of LabVIEW using a few basic examples. Students got to know the indicators, controls and could create the Talking Tom kind of project using LabVIEW and enjoyed the first day's session.

The students were introduced to the image processing tools and modules on the second day. They were made to work on a few projects and applications like, character recognition, text to speech and speech to text conversions which support the blind people in helping them to read out the boards which they encounter. The last day, students were trained to develop a project on pattern recognition and face recognition using image processing and AI & ML techniques.

The students benefited from the workshop in terms of knowing a new software like LabVIEW and learning its usage and various image processing techniques with AI & ML integrated to it. 43 students from 2nd, 4th & 6th semester were registered to the student development programme. The 3 days student development programme came to an end by an official valedictory event at 4.30pm on the 24th of June 2022. The students shared their feedback and the certificates were distributed to all the participants.



Fig: Certificates distribution



Fig: Group photo of the SDP.

14. Open Day Project Exhibition -2022

The Open Day Project Exhibition - 2022 was organized in the Department of Electronics & Instrumentation Engineering on 25th June 2022. The judges for the Project Exhibition were **Dr. G. N. Keshavamurthy** Asst. Professor, Dept. of E&IE, SIT, Tumakuru and **Mr. Vijayanand Bagewadi**, Business Director, BGK, Medical Technologies & Solutions, Bengaluru. There are 12 projects exhibited from the 8th semester students, out of which 2 best projects are selected based on the Novelty, Social impact, Efficacy of implementation,

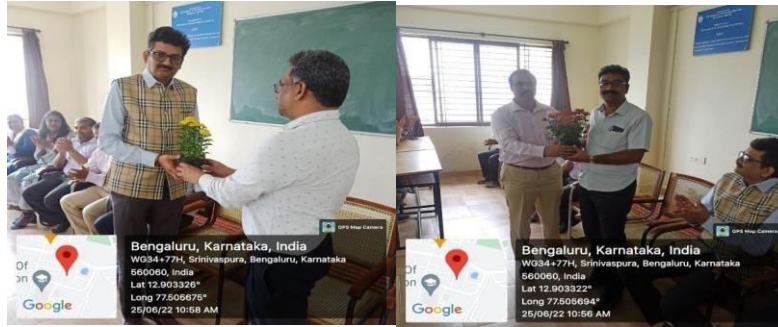


Fig: judges are welcomed by the faculty members of the department.



Fig: Project evaluation by the Judges.



Fig: Dr. D Jayadevappa, HoD, addressing the open day project exhibition.

15. Seminar on “Overview of FTIR Spectroscopy Instrumentation & its Applications to Molecular Analysis”.

A Seminar on “An Overview of FTIR Spectroscopy Instrumentation and its Applications to Molecular Analysis” was organized by the Department of Electronics & Instrumentation Engineering on 9th July 2022. Dr. Mahesh B, Professor & HoD, Dept. of chemistry, JSSATE, Bengaluru was the speaker of this seminar. The objective of this seminar was to enlighten students about the various analytical instruments used to do analysis of organic and inorganic substances. The speaker discussed the different career avenues available in India and abroad. The presentation also gave insights into analytical chemistry required for entering into the Pharmaceutical industries. Students have understood the application of Analytical instruments. Seminar was very much useful to students since they are studying Scientific and analytical Instrumentation subject in 4th semester. Finally this seminar was useful in understanding the opportunities for higher education and advantages with the various job opportunities in private and public sectors. This program was organized by Mr. B R Renukumar, Asst. Professor, Dept. of E&IE.



Fig: The speaker addressing the students.

16. Invited talk on Tools and technologies for data science big data analytics

The invited talk is arranged for the students of 6th semester students on 20th April 2022. The talk covered data analytics tools such as MS Excel and visualization tools such as Tableau, Power BI etc. Data science tools and techniques are required for almost everyone. This is arranged for the benefit of the students and after this talk they continue further exploration of the tools and technologies of data science. The speaker Mr. Prabhushankar M.R, IEM, JSSATE, Bengaluru.



Fig: Speaker addressing the students.

Cultural Event

1. Kannada Rajyotsava Celebration

The Admissions team of Electronics & Instrumentation Engineering and Electronics & Communication Engineering Departments has organized the 66th Kannada Rajyotsava event on 11th November, for the first year management students and second year students. The event was formally inaugurated by Dr. Bhimsen Soragoan, Principal, Dr. B P Shivakumar, Dean, and Student welfare, Dr. D. Jayadevappa, HoD, E&IE, Dr. D. Mahesh Kumar and Dr. T.S Nanjundeshwaraswamy. As part of the celebration, three competitions were organized: face painting, treasure hunting and Dumb charades. There were totally 68 participants from all the branches along with five participants from the first year. There were two winners in each competition and cash prize was distributed to the winners. All the students enthusiastically and actively participated in the programs. Particularly the students who got admission to the first year were happy. We appreciate the efforts of third and fourth year students of the E&IE department, who coordinated and conducted all the programs. This event was coordinated by Dr. D Maheshkumar, Dr. Aravind H S, Mrs, Bhanumathi K S, Mrs. Savitha A C, Mrs, Harshitha S, Mrs. Neela A G, Mrs. Sowmya M



Fig: Inauguration of the event.



Fig: The organizing committee and the participants.



Fig: Three competitions: face painting, treasure hunting and dumb charades.

DEPARTMENT OF INDUSTRIAL ENGINEERING AND MANAGEMENT

1. Three days Training programme on Data Analytics

Three days Training programme on Data Analytics was conducted on 26th, 27th and 29th November 2021. The resource person was Dr Ravishankar, Professor, IEM dept, BMSCE. The programme was coordinated by Dr M Vijaykumar, Associate Professor and HOD.



Fig : Training programme on “Data Analytics”

2. Seminar on Cyber Security and Risk Management

A seminar was organized on 27th October 2021 for the students of JSSATE. On “Cyber Security and Risk Management”. The seminar was presented by Mr. Amit Subhanje, Cyber security Auditor at GE, The event was coordinated by M R Prabhushankar, Asst Professor.



Fig: “Seminar on Cyber Security and Risk Management”

3. Guest lecture on “ERP and PROJECT MANAGEMENT

A guest lecture was given on “ERP and PROJECT MANAGEMENT - Perspective by Industry Practitioner” by Mr. Virupaksha H S, General Manager, Ace Manufacturing Systems around 31 students attended the event on 08.12.2021. The event was coordinated by M R Prabhushankar, Asst Prof.



Fig: Guest lecture on “ERP and PROJECT MANAGEMENT”

4. Guest lecture on “Overview of Data Science & Data Analytics”

A guest lecture was given on “Overview of Data Science & Data Analytics” by Mr. Satish Kumar, Co-Founder, Markhow Consulting. Around 32 students attended the event on 16-12-2021. The event was coordinated by M R Prabhushankar, Asst. Professor.



Fig: Guest lecture on “Overview of Data Science & Data Analytics”

5. A guest lecture on “Applications of ERP”

A guest lecture was given on “Applications of ERP” by Mr. Virupaksha H S, General Manager, Ace Manufacturing Systems. Around 30 students attended the event on 22-2-2022. The event was coordinated by M R Prabhushankar, Asst. Professor.



Fig: A guest lecture was given on “Applications of ERP”

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

Workshops/Webinar/FDP/SDP/Industry-visit/Technical talks

1. Interpersonal Communication Skills and Employability Skills

A Webinar on “Interpersonal Communication Skills and Employability Skills” has been organized by Dr. Chayadevi ML Associate Professor ISE and Dr. Rekha P M Associate Professor & Head ISE for the students on 25th Aug 2021 from 12pm noon. Two days earlier, students were asked to register for the event and more than 250 students registered thru the link <https://bit.ly/JSSComm>. On the day of event i.e., 25th Aug 2021 12pm, with online mode using zoom link <https://us02web.zoom.us/j/85266308359> session was started. Dr. Chayadevi ML delivered welcome note and Speaker introduction. Mr. Vinod David, speaker of the session is a Corporate Trainer, has more than 16 years of experience in Training Soft skills and finance. Sir worked with NIIT as training manager and also worked as Process developer with Genpact, IBM for 11 years. Nearly 100 students were login [maximum capacity was 100] and remaining were given with YouTube link, <https://www.youtube.com/c/SkillingIndiaIn>. Speaker delivered the session and explained about interpersonal skills and employability skills with PPT and students interacted with the speaker very well. Session went upto 1.20pm and students were asked to submit feedback online thru the link <https://bit.ly/Sindiawebinar>. Students will be distributed with the E-Certificates after verification of their details to certificate. Session concluded by Dr. Chayadevi M L with a thank you note.

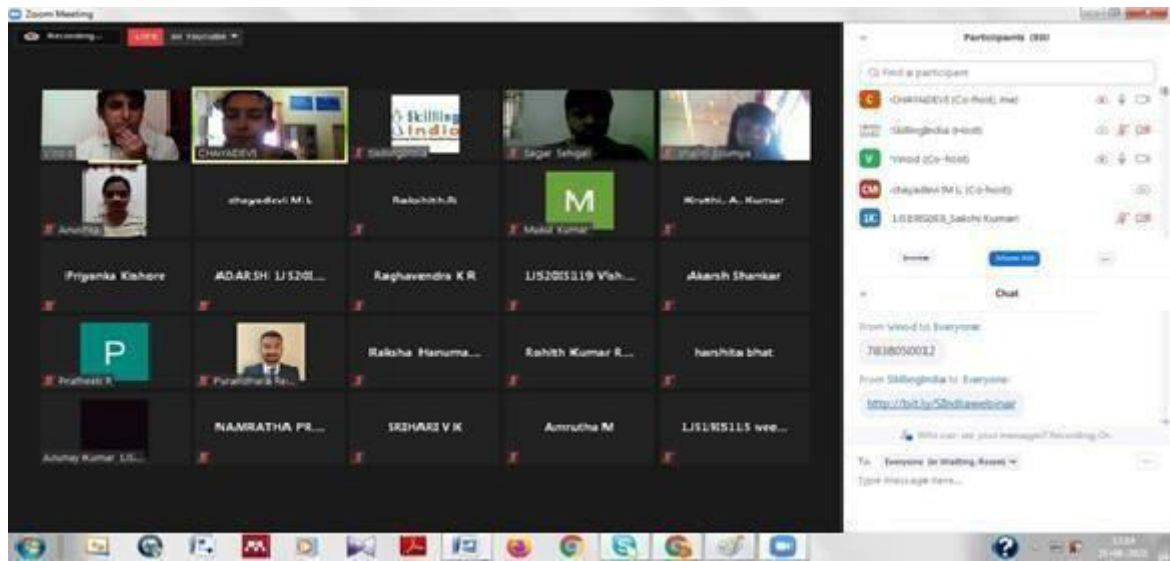


Fig: Snapshots of event

2. Report on Advanced ICT Tools for Higher Education workshop

Date: 28th to 29th September, 2021.

Day 1:

The inauguration of the two days' workshop on "Advanced ICT tools for Higher Education" was successfully accomplished and this was followed by a briefing and hands-on session on making the course material (lecture videos, Course textbook, Reference materials, Syllabus, Lesson Plan, Lab experiment videos, Quiz, Course games) available to the students in an effective way. The resource person for the day was Dr. Saroja Bhusare, Dept. of ECE, Dr. Sowmya K.N, Dept. of ISE and Mr.

Praveen P, Dept. of E&I. The digital medium selected to cater this was Google Sites. The hands-on session went on with the designing of a website for the students which can be shared to and utilized by the students via link or QR code prior to the commencement of classes. Tiny link of URL was discussed. The website design seemed very effective and interesting.



Fig: Snapshots of events

Day 2:

Day 2 learning began with hands on session that was handled by all three coordinators and it was the continuation of the previous day's session. The coordinators taught about the unique way of conducting quiz/activity through Jeopardy Lab games. This could also be embedded into the google site which was created the previous day. Later the participants were made to understand the way of embedding video to an image using the Thing link website and later adding it into the website created.

Awareness about edTED website in which video lectures can be posted and how the quiz can be conducted on the same platform were taught. Even this was able to be included in the website. There was an option for making room for extra learning via reference videos and for discussions. This was a kind of emphasis given to self-learning. Participants were demonstrated with the advanced parameters

of Google forms in which the responses which an user/student provide can be prompted to be valid using the Response Validation option. The session was informative and would be helpful in the upcoming days to all faculty.

Post lunch, **participants were** demonstrated with the certificate designing and every participant designed one. This was followed by a valedictory ceremony where participants shared their feedback and experience regarding the workshop. Our Joint Director Dr. H.R Mahadevswamy, our beloved Principal Dr. Mrithyunjaya V Latte, Dean Academics Dr. BhimsenSoregaon, Dean Research Dr. D.V Ashoka and our HOD Dr. Rekha P.M graced the occasion. Dr. H.R Mahadevswamy sir emphasized the importance of digital tools in teaching learning process. The best websites created by each participant was demonstrated and was appreciated by the organizer

3. Agile Technologies

A technical talk was organized by the Department of ISE on 23rd October 2021 for the III, V and VII sem students ISE. Mrs. Pramodini Arun, Scrum Master, British Petroleum, United Kingdom was the resource person. She has a total experience of 20 years in the IT industry with more than 10 years of experience in Project/Program Management with cross-functional global teams (Europe, Asia, North and South America, Australia).

The talk was about introduction to agile technologies, the difference between the traditional model and the agile model. The agile manifesto was explicated in detail. The typical cross functional scrum team was explained with practical examples. The various sprint ceremonies of scrum which included daily stand up, backlog

refinement, preplanning, sprint review, retrospective and again planning was explained and demonstrated with a game called as the Paper Plane Game 6 teams were formed with one as the scrum master. The teams were asked to execute the task of making paper planes in 2 sprint. Each sprint consisted of 3-minute planning phase, 3-minute execution phase and 3-minute retrospective phase. With this task the participants were able to understand how agile gave better results in short duration.



Fig: Snapshots of event

Placement & Training series

Webinar on “Placement and Training” was organized by Department of Information Science & Engineering & Head of the Department Dr. Rekha P M, JSSATE, Bangalore for 6th semester students of ISE on 23/10/2021. Resource person was Supreeth Y S, Director & CEO of Tequed Labs, Bangalore. Program started at 3:00pm in an online mode with zoom meeting. Rekha PM, Associate Professor, HOD, ISE, welcomed the resource person and students and also introduced the resource person. More than 100 students of 6th semester of Information Science & Engineering were present. Speaker Supreeth Y S sir, first introduced him to the students and also gave a brief introduction about Tequed Labs. Also, he highlighted the contents of the webinar. The Speaker explained about the stages of Engineering i.e., First year is for Exploration, the Second Year is Introduction to Domain and then Third year is Learn Innovate Explore and finally Fourth year is to prepare for the Future.

The Resource person also gave insight on placement preparation i.e., how to prepare an attractive resume and how to get selected to highly paid company. Students were given an insight on how to choose the topics for Mini-Projects and also Internship, Paper publication and also deciding on the future path which is Job or MS/MTech or Startup (Build your own company) or Prepare for government exams (IAS, KAS etc.). After the session Students got clarified their doubts and gave their valuable feedback on the entire session. The session ended with a vote of thanks by Dr. Rekha P M, HOD, ISE, to Supreeth Y S for taking the time out to educate the students on providing the tips for Internships and Placements. It was an interactive and motivational session which gave an insight on Carrer Planning. HOD also thanked the Event coordinator Mrs. Punitha M, for making the event successful.

5. Life Beyond Engineering

Objective:

Be aware of the future after engineering and concentrate on personal development. He also focused on how to pursue your hobbies and passion. Time management was the main focus.

A technical talk was organized by the Department of ISE on 27th November 2021 for the student of V sem. The talk was presented by Alumni of ISE, JSSATE, Mr. Vyshak Bhargava. Vyshak Bhargava is a WMS Consultant in M/S Google, Bangalore. He has 8 years of experience in this field. He is also a music director and has scored music for short films and movies. The session was for 1 hour. The topic was Life beyond Engineering. Around 50 students of the V sem attended the session. The session was on the importance of life beyond engineering. If an individual has any interest pursues it. Hobbies give you an opportunity to enhance your life. Hobbies allow you to distress yourself while remaining mentally productive. Some hobbies require creativity and if you develop creativity through your hobby, it can be beneficial. Creativity can help you experience new things at school and work. The skill of being creative is essential in today's world.



Fig: Snapshot of event

6. Awareness of AICTE Activity Program

A talk was organized by the Department of ISE on 2nd December 2021 for the III, V and VII sem students ISE. To raise awareness about giving back to our community that we live in. The department of ISE has called upon Youth for Seva an organization aimed at empowering the youth and giving them a chance to serve the community. This organization has over 6 thousand students trained across India and over 800 volunteers. Youth for Seva has been involved in various activities like vaccination drives, blood donation camp and chiguru- kids carnival to name a few. This organization helps us experience the joy of giving. Activities and hope we all get a chance to experience the true joy of giving back.



Fig: Snapshot of event

7. Industry Perspective of Integration of Infrastructure

Date: 04-12-2021

The Coordinator Extended a warm welcome to the resource person Miss: Deepika Nandan, other HOD and Other faculty members. Miss. Deepika Nandan introduced about the industry perspective of Integration of Infrastructure. The main objective of here topic was completely the study focusing towards. How the big data is handled in industry which is million and billion terabytes of size. The capability of a server or a desired work station. She referred a call study of the setup that she herself is managing at Bosch. The topic focused was Integration of Bosch IOT-cloud. She has highlighted about the connectivity between RDBMS-SQL- bigdata - NoSQL and new SQL etc. The whole presentation was narrowed down and focused towards mango db, as a type of databases. The usage of MANGODB in handling big data as an introduction to no SQL database. All the students have interacted with the Resource person and the session was very good and Informative.



Fig: Miss Deepika delivering her session

8. Java Full stack application development

Seminar on “**Java Full Stack Application development**” was organized by the Department of ISE on 10th Dec 2021 for the students of 5th and 7th sem. The Seminar was presented by Mr. Vikas, Lead Technical Specialist, M/s Technoserve, India. **M/s Technoserve, India** is under **MoU** with the **Dept. of ISE**.

Program started at 11:30am in an online mode. Dr. Dayanand P, Professor in ISE Department, welcomed the resource person and students and also introduced the resource person. Seminar was for 90mins with demonstration. Around 156 students of 5th and 7th sem attended the session.

The session was on the learning of Full stack application development. The recruiting companies are putting individuals on this platform, and what are their expectations from the developers was clearly explained. The advantages and disadvantages of application development using Java without full stack were briefed.

One good thing about the seminar was resource person explained the Full stack concepts by demonstrating the development of a Registration form (both FE and BE) the same as Amazon.com website. Talked about, how to prepare for placements, to focus on small open source projects and development of solutions for database problems using Full stack.



Fig: Seminar on “Java Full Stack Application development” online mode,attended by Students of 5th and 7th sem ISE, JSSATEB

9. Linux and its Applications

A one day hands on session was organized by the Department of ISE on 11th December 2021 for the student of V sem. The workshop was conducted by Alumni of ISE, JSSATE. Ms. Varsha S. Varsha S is a Software Engineer in M/S Robert Bosch Engineering and Business Solutions Private Limited, Bangalore. She has 3 years of experience in the area of Cloud Infrastructure. She was the best outgoing student. She has won many awards in Robert Bosch in a span of 3 years. The workshop with hands on session was on the topic “Linux and its Applications”. Around 90 students of the V sem attended the session. The workshop mainly focused on the practical aspects of Linux and its Applications. The pre-requisites for the students before attending the workshop were to install Virtual Box and Putty. The session started with introduction to unix, difference between unix, linux and windows operating system. The students practically executed the various unix commands, the security management in the network, firewall implementation. Finally, students were able set up and run the apache web server.



Fig: Snapshot of event

10. Personality Development Skills

A personality development session was organized by department of Information Science and Engineering students. It was for first year newly admitted students for the department. The speaker is Mrs. Nirmitha Chandra, An Charter Accountant in RR Nagar, Bangalore. She gave a brief introduction to students on overall personality development and leadership skills that Date: 04-12-2021 students should uphold during their academic and carrier life.

She also motivated the students to perform well in their studies by being punctual and disciplined. She also inspired them to be regular to class and complete the daily task regularly, bits of daily work will be easier and simpler rather than last moment huge step. She also told nothing is achievable without default.

All the dreams of students will come true only if their work hard to achieve them. Totally it was a motivational talk to the students.

11. Research Development Program on SBK-Storage Benchmarking Kit

Two-day research development program on Software Benchmark Kit was organized by Department of Information Science and Engineering, JSSATEB. The resource person was Dr. Keshava Munegowda, Vice president, Goldsman Sachs, Bengaluru. The program started on 11.30AM on 31st Jan 2022.

Day1: On 31/01/2022, the Speaker gave a brief introduction of software Benchmark System and its uses. Software benchmarking typically refers to a process by which the development cycle of a software manufacturer is compared to other businesses to determine the efficiency of the company. This is often done to determine where improvements can be made to the development process, and to ensure that a company is running at peak efficiency. These comparisons are usually quantitative in nature, as they deal with numerical values and figures to gauge how quickly and effectively a company is performing. It is one of the most important things that a business relies on software development can do is to establish a software performance benchmarking system. This is used to determine how a system performs when tested under a particular workload. It can test stability, responsiveness, effectiveness, speed or something else. It can also be used to investigate, measure, validate or verify other parts of the code, such as the scalability or usage. There are a few different types of benchmarks that you may want to establish. These can include:

Load Benchmarking: Load tests can be used to establish how a system will behave under a specific load. Often, this will be the amount of traffic that you anticipate your programs will see on a certain day. This test will help to establish the benchmark for application performance, especially in business transactions. Developers need to monitor software performance in this way to identify bottlenecks that can occur.



Stress Benchmarking: Stress benchmarking allows developers to understand the limits of a system and helps them to determine whether it is built to work with the current load and the expected load into the future.

Endurance Benchmarking: Endurance benchmarking looks for any leaks that occur. This can be due to memory usage or performance degradation. It helps to model a significant load on a system for an extended period of time- i.e. testing performance into the future.

Spike Benchmarking: Spike benchmarking tests how a system will perform (if it performs at all) if there is a sudden, dramatic change in loads.

Breakpoint Benchmarking: Similar to stress benchmarking, this looks at how far a system can be pushed until it breaks.

Software performance benchmarking serves different purposes. It can be used to demonstrate whether or not a system meets the criteria set forward, it can compare two applications to determine which one works better, or it can be used to measure a system to find what performs badly. Most benchmarking is undertaken without setting goals because you want it to be a baseline without any factors going into it.

Day2: 01/02/2022 the speaker introduced various available software Benchmark Kit. Few of software benchmark tools are PassMark PerformanceTest, Novabench, 3DMark, HWMonitor, UserBenchmark, CPU-Z, SiSoftware, Geekbench, PCMark 10, Cinebench, Speccy, Fraps. The speaker explained the features and uses of each of the tools. He also demonstrated the working of two software benchmark to os i.e. PassMark PerformaceTest and Novabench.

12. Ethical Hacking

Workshop on “**Ethical Hacking**” an Academic Interaction Program (AIP) session by Mr. Adithya, EC - Council Certified Instructor, was organized by the Department of ISE on 29th Jan 2022 for the students of 5th sem. The Seminar was presented by Mr. Mr. Adithya, EC - Council Certified Instructor.

Program started at 10:30am in virtual mode, Mrs. Sahana V, Assistant Professor of ISE Department, event coordinator, welcomed the resource person and students and also introduced the resource person. The session was on the introductory concepts of Cyber Security, covering the awareness and need of Cyber security in the online applications of Internet world, concepts covered are -

Speaker Created preparedness for Cyber security notion as almost all recruiting companies put individuals on the projects of cyber security, and what are their expectations from the developers was explained.

One good thing about the seminar was resource person explained the different Certification titles available for becoming a Professional in Cyber security, and ethical Hacking, later discussed about, what are the responsibilities, positions or Roles available for a Cyber security professional in the MNCs

13. Image Processing with Python

2 Day Hands on Workshop on “Image Processing with Python” hosted by the department of ISE, JSSATE Bengaluru in association with Tequed Labson 31st Jan and 1st Feb 2022 at 9:30am. The resource person Mr. Ameen Manna, Senior AI and ML Trainer at Tequed Labs. The program started at 09.30 AM in hybrid mode with Google Meet: meet.google.com/dye-dncv-mhp. 70 students from Class 5 A and B of Information science & Eggs., department were present. Students are also availing the AICTE activity points by attending the 16 hours student development program.

<p>JSS Mahavidyapeetha, Mysuru JSS Academy of Technical Education Bangalore</p> <p>Department of Information Science & Engineering in association with Tequed Labs A NASSCOM Incubated Edtech Company Presents 2 Days Student Development Program on "Image Processing With Python" All Participants shall receive AICTE Activity Points</p>		
<p>HIGHLIGHTS</p> <ul style="list-style-type: none"> ● BASICS OF PYTHON LIBRARIES ● OPENCV, PIL, NUMPY, MATPLOTLIB ● MINI PROJECTS ● ASSESSMENT ● CERTIFICATION 	<p>REGISTRATION DETAILS :</p> <p>Name: JSSATE, Bangalore Bank: Union Bank of India, Bayalagar, Bengaluru Account Number: 820363023060259 IFSC: UBIN0900748 COURSE FEE : Rs. 500/- + 18% GST = Rs. 590/- Registration Link: https://forms.gle/2KLU5M46gChYYvoqeb</p>	<p>DATE & TIME : 21-01-22 & 01-02-22 9:30 AM - 4:30 PM VENUE : Seminar Hall - II</p>
<p>Dr. SOWMYA K N & Mrs. PURNITHA M (0448504938, 9806822202) Coordinator, Dept. of ISE, JSSATE</p>	<p>Dr. REKHA F M Coordinator ISE Dept. of ISE, JSSATE</p>	<p>Dr. MRITUNJAYA V LATTE Principal, JSSATE</p>

Fig: Brochure

Day1: The program focused on image processing using python libraries like Opencv, Matplotlib, Scikit Image, Numpy. The main objective of the program was to make students understand the concept of Read an Image, Create a duplicate image, Read the Specifications of Image, Gray Scale Image, Binary Image, HSV Filter, Solid Background using Numpy.

Day2: The program focused on image processing using python libraries like Scikit Image. The main objective of the program was to make students understand the concept of Checker Board, RGB filters, Edge Detection in Images, cvt. rectangle, cvt. circle, My Live Sketch using Webcam, My Canny Sketch using Webcam, Face detection in an Image, Face and Eye detection in an image and Object detection in a Video.

14. SDP on tools and Technologies on data science & Big Data Analytics

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15. ASPICE Model in Software Engineering Date: 31st Jan and 1st Feb 2022

The student centered, holistic experience focused on understanding the values, nurturing skills and moving towards knowledge. Program was inaugurated by Pramod Nanjundaswamy, Director, Visteon corporation. He emphasized the importance of industry oriented learning in his address to students. He was instrumental in organizing the workshop by providing the resource persons from the premier company. H.R Mahadevaswamy, Joint Director emphasized the importance of models and post inauguration the speakers elaborated on the topics below.

Automotive SPICE Process Overview was given by - Gunasekaran Kulandaivel, Systems Engineering Manager followed by Requirements Elicitation, Systems Requirements & System Architecture by Sathyaksharan Balasubramaniam, Systems Engineering Lead. Soorya Sakthivel, Software Engineering Lead spoke about About Software Design, Coding, Unit & Integration Testing. System Integration Test Spec and Integration Test was discussed by Azar Sulaiman, System Integration Lead. System Qualification Test Specification and Testing was discussed by Saraneshkumar Srinivasan, System Qualification Lead. They took the case study of Automatic Brake System as a case study and discussed its life cycle from process management to prototype. Real life case study by industry experiments using

multiple tools from industry envisioned students in understanding the theory concepts learnt. End of the session was followed by a brief Q & A Session. The event was conducted free of cost and no financial liabilities were made.

16. Journey from college to corporate, Date: 05-02-2022

The Coordinator Extended a warm welcome to the resource person Miss: Vidya, and Miss Sushmitha S, HOD, faculty members and participants. Resource persons explained about the challenges and efforts they put in achieving success. Miss: Vidya told about how to she studied for securing 2nd rank in VTU, 2020. Also both alumni's explained about the importance of mini projects in the subjects like Data structures, ADE, DBMS and DAA. Understanding the way data is stored with a types of data structures place very importance in placement activities.

Miss Vidya and Miss Sushmitha mentioned the importance of GD (group discussion for the students) in placements.

What skills are judged in Group Discussion?

1. How good you are in communication with others?
2. How you behave and interact with the group?
3. How open minded are you and your listening skills?
4. How you put forward your views?
5. Your leadership and decision making skills?
6. Problem solving and critical thinking skills.
7. Your attitude and confidence.



Fig:Brochure

All the students have interacted with the Resource person and the session was very good and Informative. After the session, HOD, Dept. of ISE and Coordinators thank the Resource persons.

17. Five-day Faculty Development Program on Thrust Areas of Artificial Intelligence: A multidisciplinary approach

With the blessings of His Holiness the inauguration of the FDP was scheduled on 7th Feb 2022 in online mode. The chief guest of the inauguration was Dr. Rajneesh Ratna Associate Professor, Gedu College of Business Studies Royal University of Bhutan. Bhutan. Guest of Honour was Dr. H.R. Mahadevaswamy, Joint Direction, Technical Education Division, JSS MahavidyaPeeta, Mysuru. President of the function was Dr. Mrityutnjaya. V. Latte, Principal, JSSATE, Bangalore. Inauguration started with the invocation song by, Kum: Sriraksha Vaidya student from third semester ISE. Dr. Rekha.P.M, HOD, ISE department, JSSATEB welcomed the gathering. Dr. Malini M Patil, Associate Professor, ISE Department JSSATEB briefed about the objectives and outcomes of the FDP. Chief Guest Dr. Rajanish Ratna mentioned about the technological advancement in AI and its importance in day to day life. He has also put forth the idea of

collaboration of Royal University of Bhutan with JSSATEB. Guest of Honour Dr. H.R. Mahadevaswamy congratulated department of ISE for hosting the FDP and also mentioned about the important areas in AI, wherein the multidisciplinary research can be initiated. Principal Dr. M.V.Latte briefed about the importance of multidisciplinary areas in AI. Vote of thanks was presented by Dr. Sowmya.K.N Assistant Professor ISE Department, JSSATEB. Master of Ceremony was presented by Dr. Malini.M.Patil.

The day wise report of each session is as follows

Day1: 7th February 2022

Session 1: “Role of statistics in Artificial Intelligence”. Dr. Rajneesh Ratna Associate Professor, Gedu College of Business Studies Royal University of Bhutan.

Dr. Rajanish Ratna mentioned about statistics in Artificial Intelligence with real time examples. He has also covered wide range of statistical metrics and their relevance in using algorithms.

Session 2: “Role of ethics and value in the conduct of AI” Today and in the Future” Dr. Suja R Nair Educe Micro Researcher, Bengaluru.

Dr. Suja Nair said that role of ethics in AI is a major concern in today’s environment. Dr. Suja Nair narrated in detail ethics and value in the conduct of AI.

Day 2: 8th February 2022

Session 3: “Quantum Machine Learning” Mr. Venkat Raman B Assistant Professor, Department of CSE Rajiv Gandhi university of Knowledge Technologies RGUKT Basar, Telangana.

Mr. Venkat Ramaman covered the fundamentals of Quantum Machine Learning and provided the complete insight of traditional bit and used that analogy to understand the Q bit. He also presented how Quantum Computing can be focused using Machine Learning Techniques.

Session 4: Towards trustworthy deep learning – Attacks, Defences and Evaluation” Mr. Ramesh Naidu L Joint Director Big Data Analytics & Machine Learning C-DAC, Bengaluru.

Mr. Ramesh focused his presentation on the rapid progress and success on Deep Learning in many safety and critical applications. A well designed sample using deep neural network may behave in an adversary way, which can cause deep learning to make mistakes in predictions. He discussed about evaluation methods on robustness of defenses to adverse aerial examples.

Day 3: 9th February 2022

Session 5: Digital Image Forensics: An AI perspective” Dr. H R Chennamma Associate Professor, Department of MCA Sri Jayachamarajendra College of Engineering, Mysuru

Dr. H.R. Chennamma presented the AI perspective of Digital Image Forensics with different case studies and examples.

Session 6: (Date: 9th February 2022) and Session 8 (Date: 10th February 2022) “A product based multidisciplinary approach: A case study on real time application using AI” Dr. Lingaraju G M Professor, Department of ISE Sahyadri College of Engineering & Management Mangalore.

Dr. Lingaraju narrated the importance of Design of Experiments in Research and article preparation. He explained about two important methods Box

Day 4: 10th February 2022

Session 7: AI in movie and product recommendation system with use cases. Dr. J Somashekar, Prof and HOD, Department of CSE, Goplan College of Engineering and Management, Bengaluru.

Dr. J Somashekar presented how Artificial Intelligence is most widely used for product recommendation during online shopping and movie recommendation during online movie ticket booking.

Day 5: 11th February 2022

Session 9: Digital Innovation. Mrs. Sharanyya Kantikar, Vice President Digital Innovation, Tietoevry, Bengaluru.

Mrs. Sharanyya narrated the fundamentals of AI and how it is been used for modern day innovations. She also told all the AI acts as a service or tool for most of the digital innovations.

Session 10: AI in Education: Opportunities, Potentials and Challenges. Dr. Poornima G Patil, Assistant Professor, Department of MCA, VTU Belgavi.

Dr. Poornima G Patil spoke about the significance of AI in education sector. She discussed about the challenges faced by education sector and how it can be overcome with the help of AI.

Session 11: AI in health Informatics. Dr. Pushpalatha. M.P, Professor and Head, Department of CSE Sri Jayachamarajendra College of Engineering, Mysuru

Dr. Puspalaatha presented the significance of AI in health Informatics. How AI can be used to organize and analyze health records to improve health care outcomes.

Lastly, Valedictory session was conducted, where the participants gave a good feedback about the program. Dr. Rekha.P.M HOD, Department of ISE, JSSATEB thanked the participants and the coordinators for organizing the program. An Online Certificate was given to all participants. Thus the five-day Faculty Development Program on Thrust Areas of Artificial Intelligence: A multidisciplinary approach was concluded.



Fig : snapshots of event

17. Software Testing with Career Guidance and Hands – On

Student Development Programme on : "Software Testing with Career Guidance and Hands - On" was organized by Department of Information Science and Engineering on 15 Feb 2022 Tuesday. The resource persons were Mr. Girish Shivanna, CEO & Founder of Qspiders/ Jspiders/ Pyspiders and Test Yantra Software Solutions Pvt Ltd India and Mr. Vijay Bhaskar, Senior Industrialist, Test Yantra Software Solutions India Pvt Ltd. The program started at 9.30 AM online mode with link <https://global.gotowebinar.com/register/712424083>. Dr. Nethravathi B, Assistant Professor, Department of ISE, the Event Coordinator welcomed all the dignitaries. Dr. Rekha P M , HOD, ISE Department expressed the gratitude for accepting the invitation. 100 students from Class 3rd A sec and B sec of Information science & Engg., department were present. The SDP program focused on Software testing part of software engineering. The main objective of the program was to make students understand the basic concept of software testing and the connectivity between software development and software testing and to identify Career opportunities in software testing.

It helped the students to understand the concept of Software Testing with real time examples. In the first session Mr. Girish Shivanna, briefed about the Career opportunities in software testing. He said more opportunities for software tester than software developers. In the second session Mr. Vijay Bhaskar explained about manual testing and automation testing. He explained in brief about white box and black box testing. The types of black box testing : Functional testing, Integration testing, system testing, smoke testing, adhoc testing, acceptance testing, regression testing, usability testing, recovery testing, load testing, globalization testing, exploratory testing were explained with hands on for real time examples. At last he showed how the test cases are written with examples.

The program ended by Vote of Thanks by Dr. Nethravathi B, Event Coordinator. All the students expressed that both the sessions were interactive and very much helpful.

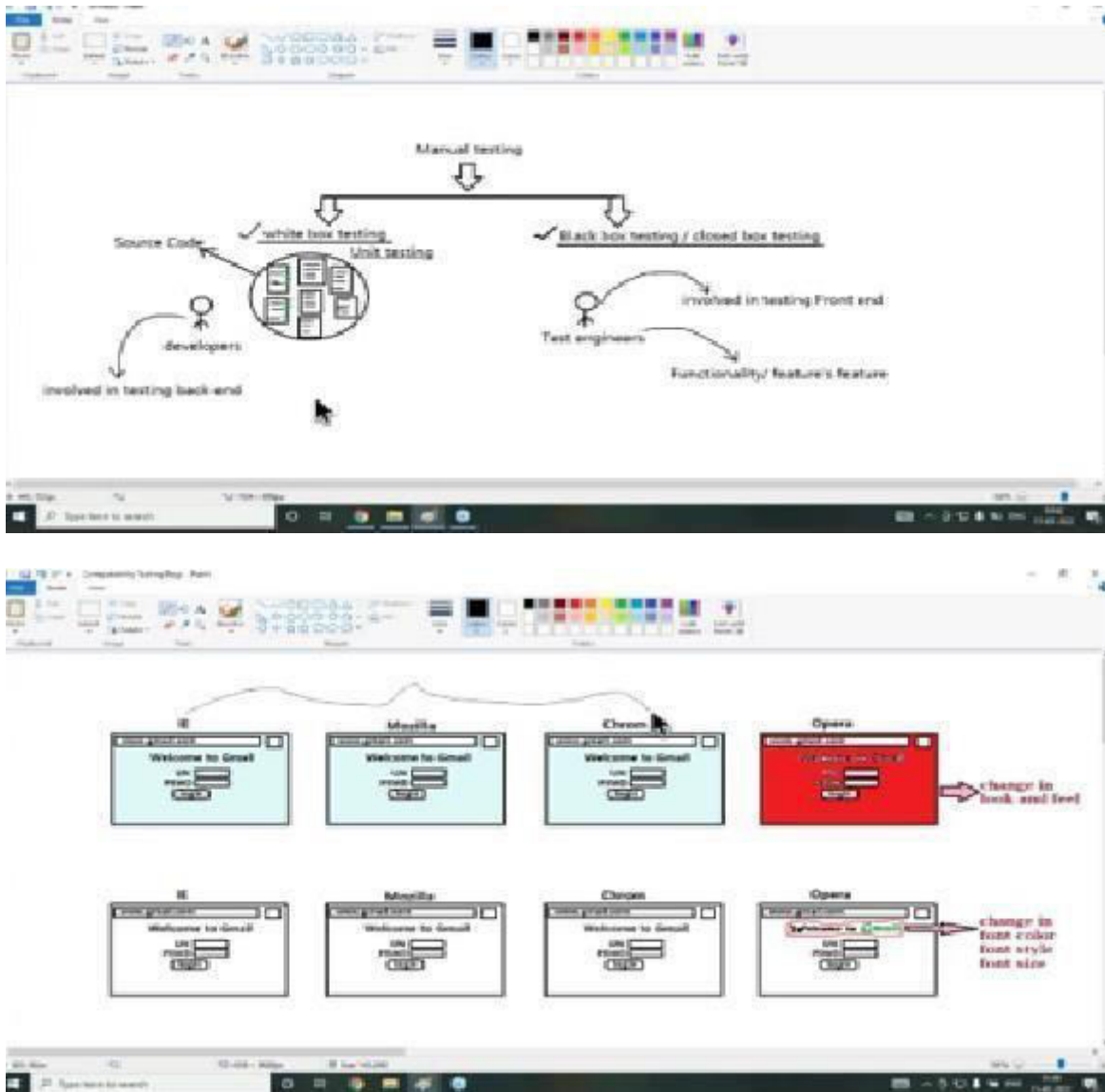


Fig: Snapshots of event

18. Five Days Virtual Faculty Development Programme (Fdp) On Current Advancements Of Machine Learning In Terms Of Ai & Iot (Aiot)

Short Term Course on “CURRENT ADVANCEMENTS OF MACHINE LEARNING IN TERMS OF AI & IOT (AIOT)” was organized by Department of Computer Science and Engineering, NIT Warangal with Department of ISE, JSSATEB from 25thApril 2022 to 29thApril 2022. The resource persons were Prof. N. V. Ramana Rao Director NIT Warangal, B Prasad & Team K4U Infotech, Sai Kumar Dandla Amazon, Dr. Damodar Reddy Edla, NIT Goa, Dr. V Santosh Kumar IITG, and Dr. Bhukya Raju NIT Warangal The program started at 4.00pm online mode with link <https://meet.goto.com/199809869> .61 Teaching Faculty and 70 Students from ISE, CSE, ECE, ELE, IEM and EIE departments were present. The STC program

focused on AI and IOT. The main objective of the program was Upon the completion of the STC the participants/trainee can understand/Gain knowledge in solving the real-world problems with respect to AI and IOT.

Day1: 25.04.2022

First Session:(4.00pm-6.00pm) : Prof. N. V. Ramana Rao Director NIT Warangal gave insight about Online Teaching Methodologies.

Second Session (6.10pm-7.30pm) : B Prasad & Team K4U Infotech gave Introduction to Python, Indentation, Python Variables, Python Data Types Numbers, String.

Day2: 26.04.2022

First Session:(4.00pm-6.00pm): Sai Kumar Dandla Amazon gave insight about Lists, Tuples, Sets and Dictionaries.

Second Session (6.10pm-7.30pm): B Prasad & Team K4U Infotech gave insight about Python File Handling, Python String Formatting, Working with Jupiter Notebook and Python tkinter.

Day3: 27.04.2022

First Session:(4.00pm-6.00pm): Dr. Damodar Reddy Edla NIT Goa gave insight about Role of Python in IoT, IoT Boards, Use cases of IOT.

Second Session (6.10pm-7.30pm): Sai Kumar Dandla Amazon gave Introduction to Raspberry Pi and Installation, Setup and Configuration pi and Projects on Raspberry Pi

Day4: 28.04.2022

First Session:(4.00pm-6.00pm): Dr. V Santosh Kumar IITG gave insight about Machine Learning Techniques for virtual and augmented reality in Health care.

Second Session (6.10pm-7.30pm): Dr. V Santosh Kumar IITG gave insight about Machine Learning Techniques for virtual and augmented reality in Health care.

Day5: 29.04.2022

First Session:(4.00pm-6.00pm): Dr. Bhukya Raju NIT Warangal gave insight about On Deep learning Application and its challenges.

Second Session (6.10pm-7.30pm): Dr. Bhukya Raju NIT Warangal gave insight about On Deep learning Application and its challenges.

All the participants expressed their feedback saying STC was very much helpful for their research and it was informative. Programme ended by Vote of Thanks by the program coordinator Dr. Anil B C.

Link of Feedback: <https://forms.gle/ut7Ye7CekXrUwzbB6>.

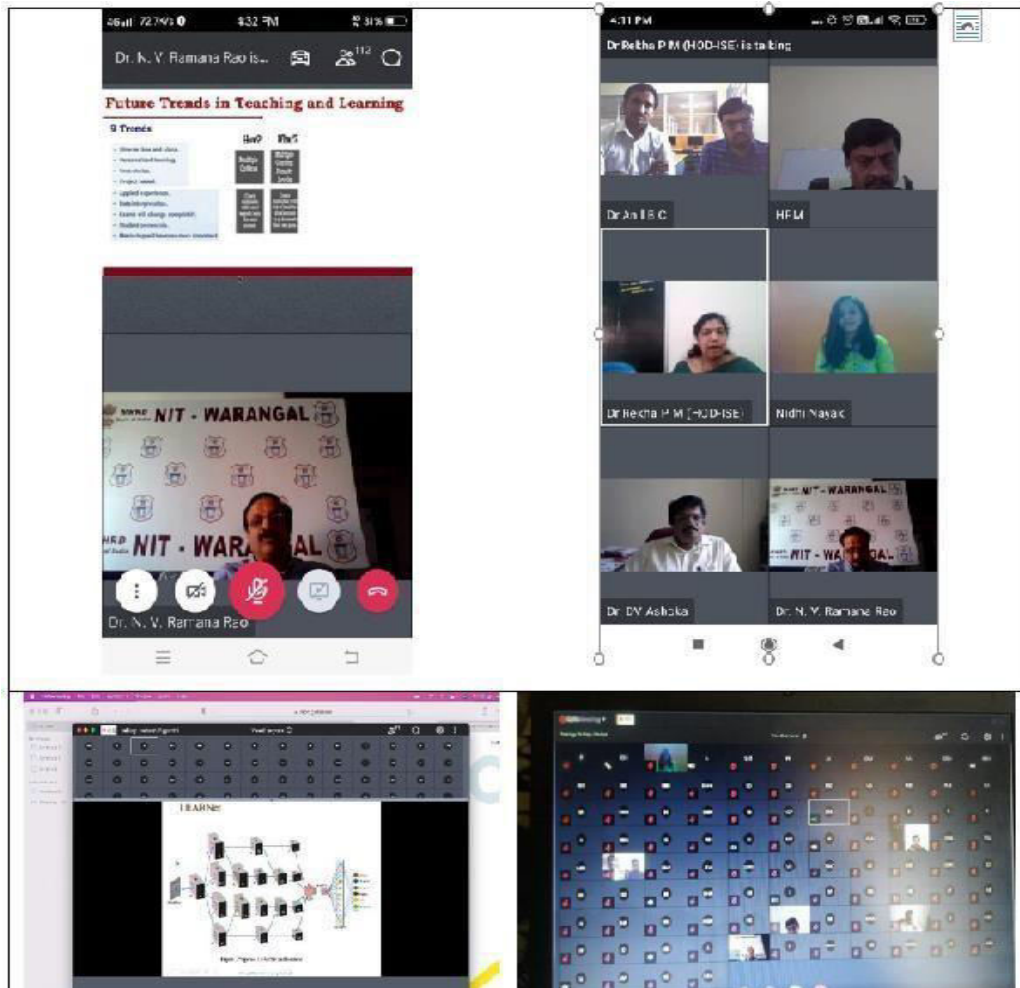


Fig: snapshots of event

19. One-week Online STC on Cryptography for Information Security

Short Term Course on “Cryptography for Information Security” was organized by National Institute of Technical Teachers training and Research (NITTTR) Chandigarh with Department of ISE, JSSATEB from 09th May 2022 to 13th May 2022. The resource persons were Sh. Ch. As. Murthy, Associate Director, CDAC Hyderabad, GS: Sh. Gurcharan Singh, Faculty, CDTI, Bureau of Police R & D, Chandigarh, MK: Dr. Mala Kalra, Assistant Professor, Department of Computer Science & Engg., NITTTR, Chandigarh, VG : Sh. Vipin Gupta, Director, U-Net Solution Moga, Punjab IS: Lt. Col. Iqbal Singh, Google India, CRK: Dr. C. Rama Krishna, Professor & Head, Department of Computer Science & Engg., NITTTR, Chandigarh, AS: Er. Amrendra Sharan, Junior System Programmer, NITTTR, Chandigarh and SS: Er. Shweta Sharma, NITTTR, Chandigarh. The program started at 11.00 am online mode with link

meet.google.com/czh-ghfr-noy. 30 Teaching Faculty/Staff from ISE, CSE, ECE, ELE, IEM and EIE departments were present. The STC program focused on Cryptography for Information Security. The main objective of the program was to apply the Security tools in the network security related subjects, which helps the students to understand the concepts in depth with Hands-on.

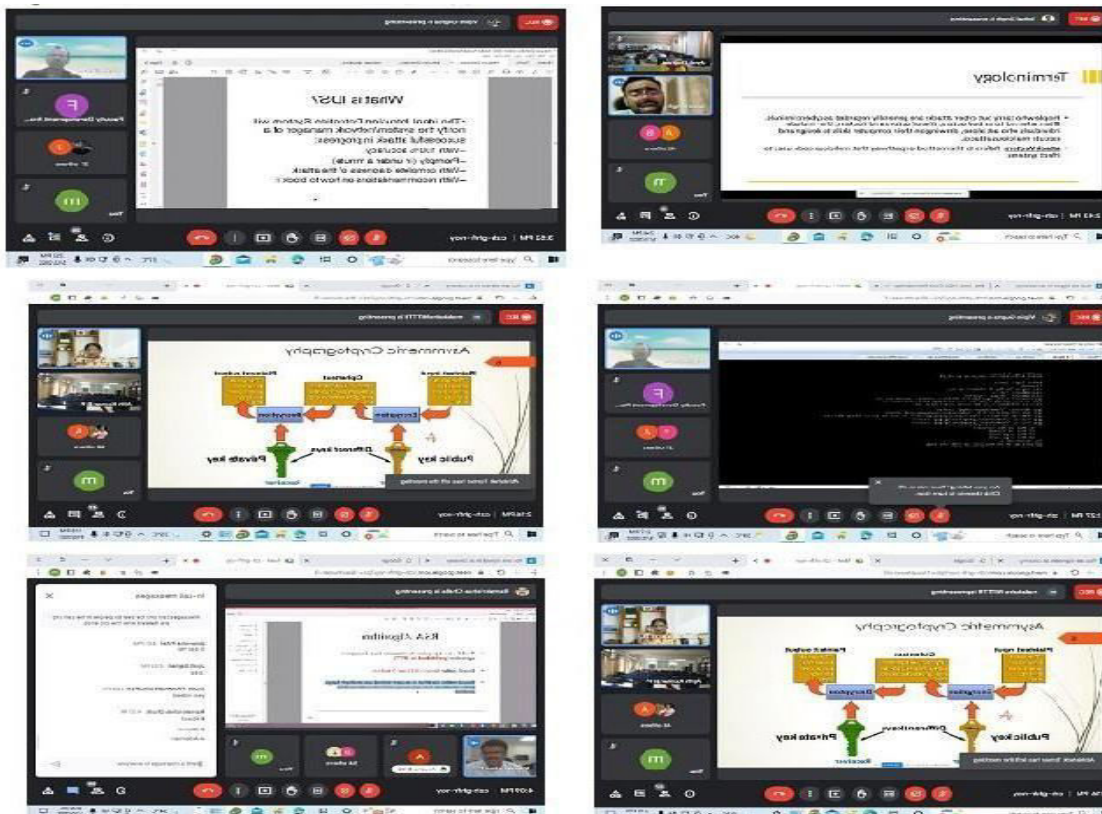


Fig: snapshots of event

20. One-week Online Practical Hands-on ICT based STC on CYBER CRIME & FORENSIC TOOLS”

Short Term Course on “CYBER CRIME & FORENSIC TOOLS” was organized by National Institute of Technical Teachers training and Research (NITTTR) Chandigarh with department of Information Science and Engg., JSSATEB as Remote Centre from 23th May 2022 to 27th May 2022.

The resource persons were Dr. Maitreyee Dutta , Professor & Head, Dept. of IMEE Dean of Academics, R&D, NITTTR Chandigarh, Ms. Amanpreet Kaur, NITTTR Chandigarh, Dr. Gaurav Kumar, NITTTR Chandigarh, Ms. Shweta Sharma, NITTTR Chandigarh, Mr. Vipul Mandhar, NITTTR Chandigarh. The program started at 9.30 AM online mode with link Google Meeting Link: meet.google.com/abn-mypi-ptd.. 32 Teaching Faculty/ Non teaching from ISE, CSE,ECE,ELE,IEM, Chemistry department were present. The STC program focused on Cyber Crime & Forensic Tools. The main objective of the program was to make participants to understand the basic concept of Cyber Crime and Attacks and to Analyze and deploy different network security Tools. program conduction details are given below

Day 1: 23.05.2022

Morning Session: Dr. Maitreyee Dutta gave brief introduction about Basics of Cyber Crime and Attacks. Ms. Shweta Sharma discussed about Performing Network Scanning Attacks using NMAP.

Afternoon session: Dr. Gaurav Kumar gave insight about Analyzing Social Media and PublicCommunication Networks

Day 2: 24.05.2022

Morning Session: Ms. Shweta Sharma discussed about Deployment of SNORT IDS and Detection of Network Scanning Attacks using rule-based technique.

Afternoon session: Dr. Gaurav Kumar discussed about using Blockchain based Secured Database Engines in Privacy Aware Environment.

Day 3: 25.05.2022

Morning Session: Ms. Shweta Sharma discussed about Detection of Android Malware using Machine Learning Techniques and Windows Live Forensics using WinLiFT Imager and Analyzer Tool.

Afternoon session: Ms. Amanpreet Kaur discussed about Implementing Cyber Forensics using Cyber Check Suite.

Day 4: 26.05.2022

Morning Session: Mr. Vipul Mandhar discussed about API Testing using Postman and Cyber Forensics using Autopsy and FTK Imager

Afternoon session: Ms. Amanpreet Kaur discussed about Performing Digital Forensics with Data Carving and Registry Analyzer Tools

Day 5: 27.05.2022

Morning Session: Ms. Amanpreet Kaur discussed about Disk Forensics using True Imager (Hardware Based) and Evidence Protection using Logicube Write Protector (Hardware Based)

Afternoon session: Dr. Maitreyee Dutta concluded the program with valediction and feedback.

All the participants expressed their feedback saying STC was very much helpful for their research and it was informative. All the participants taken Assessment test conducted from 2.30 to 3.00 PM. The Programmed ended by Vote of Thanks by the program coordinator Dr. Nethravathi B.

Link of assessment: <https://forms.gle/vSS797ePYLJQNp1b9>

Link of Feedback: <https://forms.gle/RbjkvgEWQ3CcVobz8>

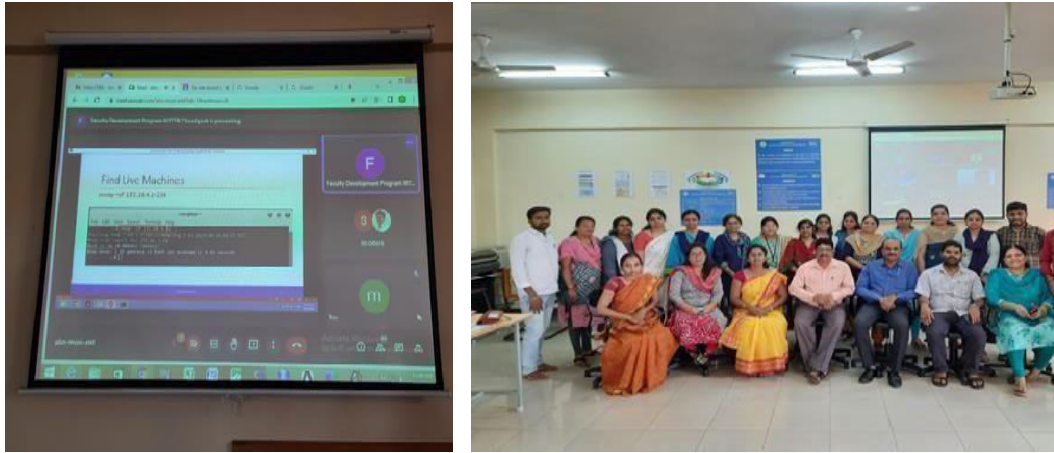


Fig: snapshots of event

21. 8th National Conference on Advancements in Information Technology NCAIT-2022, 16th & 17th June 2022

With the blessing of “His Holiness Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamijigalavaru” and with the blessing of “His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamijigalavaru”, to commemorate the Silver Jubilee (2023) celebration of our college JSS Academy of Technical Education, Bengaluru, the Department of Information Science & Engineering has conducted Two-day National Conference on “Advancement in Information & Technology “-NCAIT-2022 on 16th and 17th June-2022.

On 16th June 2022, the Conference began at 9.15 AM, with Invocation song by Ms. Divya followed by Lighting the Lamp by the Dignitaries. Chief guest for the program was Dr. Thippeswamy K, Professor & Regional Director VTU, Mysuru. Guest of Honor Dr. H R Mahadevaswamy, Join Director, TED, JSSMVP, Mysore, Dr. Bhimasen Saragoan, Principal presided over the programme. Dr. Rekha. P M, Assoc. Professor, HOD, ISE, Convener NCAIT-2022.



Fig: Invocation song by Divya



Fig: Lightning the Lamp by ignitaries



Fig: Key note by Chief Guest & Felicitation of the chief Guest by Principal & CD Release

Dr. Rekha. P M, HOD, ISE welcomed the gathering, Dr. Ashoka D V, Professor, Dean Research, presented detailed information about the National Conference, Dr. Dayananda P, Professor, ISE Introduced the Guest to Audience. Dr. Thippeswamy K, the chief Guest appreciated ISE dept. for organizing this Conference. He stressed upon the importance of AI & ML, Cloud Computing, Deep Learning, Image processing and Block Chain technologies and better usage of it. Dr. Bhimasen Saragoan, Felicitated the chief Guest. Presidential address was delivered by Dr. Bhimasen Saragoan, Principal wished all the Participants to exchange their Technical knowledge in this Conference. Dr. Mahadevaswamy, Joint Director, TED, JSSMVP, Mysore, Guest of Honor, expressed his extended thought of Information Technology in all the aspects of the life and make better use of it. CD release by the Chief guest and Dignitaries, the papers being presented in the conference were officially released.



Fig: Participants of the Conference

Dr. Anil B C, Assistant Professor of Dept. of ISE presented vote of Thanks.

During the Conference, selected Papers were presented and more than 100 candidates from various Engineering colleges like JNNCE Shivamogga, Adichunchanagiri Institute of Technology Chikkamagaluru, Dayananda Sagar College of Engineering, R.N.S Institute of Technology, Govt. First grade college Vijayanagar and internal participant from ISE, ECE branches participated.

Paper Presentation was conducted parallelly by Four Panels. The Session chairs for 4 Panels were as follows:

Panel 1: Dr. Rekha Venkatapur B, Professor & Head Dept. CSE, KSIT.

Dr. Sowmya K N, Assistant Professor, Dept. of ISE, JSSATEB

Panel 2: Dr. Shubha Rao, Associate Professor of Information Science, BMSCE, Bangalore

Dr. Nagamani N P, Assistant Professor, Dept. of ISE, JSSATEB

Panel 3: Dr. Bindia M K, Associate Professor of Computer Science & Engg, SJBIT, Bangalore

Dr. Nethravathi B, Assistant Professor, Dept. of ISE, JSSATEB

Panel 4: Dr. Dayananda P, Professor, Dept. of ISE, JSSATEB

Dr. Sathish Shet, Assistant Professor, Dept. of ECE, JSSATEB



Fig: Four Parallel Sessions with Session chair for Paper Presentation On the Second Day that is on 17-6-2022, Project and Poster presentation was conducted



Fig: Three Parallel Sessions with Judges(Alumni) for Project Presentation



Fig: Poster Presentation

Judges for Project Presentation

Panel 1: Vidhya Singh, Alumni, Senior Software Engineering Manager at GE Healthcare.

Dr. Nagamani N P, Assistant Professor, Dept. of ISE, JSSATEB

Panel 2: Mrs. Vanishree Yaji, Alumni, Senior Software Engineer, BlueJeans Verizon

Mrs. Anitha P, Assistant Professor, Dept. of ISE, JSSATEB

Panel 3: Shishir Muralidhara, Alumni, Research Assistant at DFKI, Germany

Mrs. Sahana V, Assistant Professor, Dept. of ISE, JSSATEB

Judges for Poster presentation

Dr. D. Jayadevappa, Professor & Head, Department of EIE, JSSATEB.

Mrs. Mamatha G, Assistant Professor, Dept. of ISE, JSSATEB

Mrs. Punitha M, Assistant Professor, Dept. of ISE, JSSATEB

Three best Papers in Paper Presentation, three best Projects in Project Presentation and One best poster was identified and Cash Prize with certificates was awarded for the winners on Techno Cultural Fest which was organized by the department on 2nd July 2022. Judges gave the inputs for the participants and also appreciated the Projects especially lower semester project and their innovative thoughts. Thus NCAIT 2022 was concluded successfully. Our heartfelt thanks to JSSMVP and Management for their kind support and encouragement for organizing 8th National Conference NCAIT 2022 successfully. We also thank Management, Joint Director, Principal, Deans, HODs and staff of JSSATEB for the support & cooperation for organizing National Conference. Through Paper, Project, Poster Registrations, department of ISE could generate **Thirty- Three Thousand Seven Hundred Rupees only [Rs. 33,700/-]**.

22. Open Day Project Exhibition 2022

The term “OPEN DAY – Project Exhibition” refers to projects, presentations, or products through which students exhibit what they have learned, usually as a way of demonstrating whether and to what degree they have achieved expected learning standards or learning objectives. An exhibition is typically both a learning experience in itself and a means of evaluating academic progress and achievement. JSS Academy of Technical Education organized Open Day Project Exhibition cum competition of all final year student projects of all departments on 25/6/2022. The Department of Information Science and Engineering was a part of this event. 33 projects with each project consisting of 4 members participated in the event.

Dr. Nagamani N P and Mrs. Sahana V, Assistant Professors coordinated the event for the ISE Department.



Fig : snapshots of event

23. ISE-Techno Cultural Fest SAMYOG 22

With the blessings of His Holiness Jagadguru Sri Shivarathreshwara MahaSwamiji, A two day Techno Cultural Fest was organized by Department of Information Science and Engineering, JSSATE Bangalore on 1st and 2nd July 2022. The Event was organized under the banner of Samyog – a student forum created in the year 2012.

On 30th June 2022, students of ISE performed a small flash mob events, in order to create

awareness of the fest and ongoing activities to various other department. Banner, posters and invitation were created by the students design team and circulated to other departments and other colleges. Thus it brought more number of participants to the events.

On 1st July 2022, students organized various technical events like blind coding, fast typing, mini project exhibition etc. There were sports event like mini cricket, mini basketball etc. Other non-technical events like Squid games, Escape room, One minute short games were organized. There were totally 14 events organized and 240 Participants. Cash prizes for each event was given based on registration amount collected for that event.



Flash Mob



Mini Project Exhibition



Fast typing Event



Various Games



Sports Events



Chief Guest- Mr. Vishweshwarayya



Prize Winners



Dance Performance by Students



Musical Event by ISE Students



Coordinators

On 2nd July 2022, a key note session was organized for students. The technical talk was on the topic money management. It was addressed by Mr. Vishweshwarayya K, Vice President Paytm Bank, Mumbai. Prize winners of NCAIT national conference was given by the chief guest. Open Day Project Exhibition Prize winners were announced. Special prize for students were given by HOD Dr. Rekha P.M. Best All-rounder was given to 8th sem student Aditi J, Best Coder was given to 8th sem student Rajiv Ranjan Singh, Best student was given to Venkatesh Pai. In the category of academic excellence, Harshitha of 6th sem and SriRaksha of 4th sem won prizes. Dr. D.V.Ashoka Professor of ISE Department, gave a formal introduction of about Samyog. Vote of thanks was said by Mrs. Nagashree.S. Assistant Professor of ISE Department. Later on after a short break, various cultural events were carried on. Girls of 4th sem performed bollywood retro dance, 2nd sem students performed solo dance. There was a small recap video of final year was showcased, followed by teachers quiz event. The two day techno cultural fest came to formal end with the performance of college musical band team – Dwani. Finally a photo session was carried on with the final year students.

24. Introduction to Cyber Security

Workshop on “**Introduction to Cyber Security**” an Academic Interaction Program (AIP) session by M/s TCS was organized by the Department of ISE on 15th July 2022 for the students of 4th sem. The Seminar was presented by Mr. Ajay Ganapule, Program Manager, of M/s Tata Consultancy Services, Bengaluru, he was accompanied by Mr. Praveen Chandran V, Academic Relationship Manager, M/s TCS – Karnataka.

Program started at 11:30am at Seminar hall-1, Dr. Dayanand P, Professor of ISE Department, JSSATEB welcomed the resource person and students and also introduced the resource person. Seminar was for 90mins with lot of informative samples on Cyber-attack scenarios and security measures. Around 12 Faculty members including Dean Research Prof. D.V Ashoka, Prof. Naveen .C, HOD of CSE, Prof. Rekha P.M, HOD of ISE and 180 students from 4th sem of both ISE and CSE Departments, attended the session.

The session was on the introductory concepts of Cyber Security, covering the awareness and need of Cyber security in the online applications of Internet world, concepts covered are -

- Evolution stages (1940-2020), architecture, listing of different types of attacks, and vulnerability with real world samples, counter software’s developed to encounter attacks (antivirus, reeper, etc). The advantages and disadvantages of automating or robotizing the tasks were discussed.
- Speaker Created preparedness for Cyber security notion as almost all recruiting companies put individuals on the projects of cyber security, and what are their expectations from the developers was explained.



Fig: Snapshots of the event

One good thing about the seminar was resource person explained the different Certification titles available for becoming a Professional in Cyber security, and ethical Hacking, later discussed about, what are the responsibilities, positions or Roles available for a Cyber security professional in the MNCs Mr. Praveen Chandran, Academic Relationship Manager, M/s TCS addressed students on building up of - confidence to communicate, soft skills, programming skills before facing the recruitment interviews.

25. NodeJS and ReactJS

Workshop on “**NodeJS and ReactJS**” was organized by the Department of ISE on 23rd July 2022 for the students of 4th sem. The training was conducted by Mr. Pawan Ranjit, Associate Software Engineer, M/s J P Morgan Chase, Bengaluru,

Program started at 10:40 am at Seminar hall-2, Dr. Dayananda P, Professor of ISE Department, JSSATEB welcomed the resource person, HODs and students and also introduced the resource person.

Workshop was for 120 mins with lot of informative java script samples on frame works of NodeJS and ReactJS. Prof. Naveen .C, HOD of CSE, and Prof. Rekha P.M, HOD of ISE were present during the inauguration of the workshop. Around 190 students of 4th sem from both ISE and CSE Departments attended the session.

The session was on the introductory concepts of the frame work of NodeJS and ReactJS, covering the knowledge and requirement of NodeJS, a back-end JavaScript runtime environment and ReactJS, a front-end JavaScript library for building user interfaces in the real-time Web applications Speaker Created awareness for Java scripting notion, as almost all recruiting companies put individuals on the projects of Web applications

- One good thing about the seminar was resource person explained the frame work of NodeJS and ReactJS by demonstrating the Java script code developed for server side and interface for a case study of TODO list
- speaker talked about, how to focus on small web application project using open source NodeJS and ReactJS



Fig: Snapshots of the event

26. Industries visit

Avery Dennison Profile

Avery Dennison Corporation (Avery Dennison) is engaged in the production of pressure-sensitive materials, and a variety of tickets, tags, labels, other converted products, and office and consumer products through embossing, printing, stamping, and die-cutting. The Company operates in two segments: Pressure-sensitive Materials and Retail Branding and Information Solutions. In addition to its reportable segments, the Company has other specialty converting businesses composed of Vancive Medical Technologies (Vancive) and Designed and Engineered Solutions (DES) and radio-frequency identification (RFID).



The visit started at 10 am from the JSSATE-B CAMPUS with a student strength of 31 members accompanied by 2 teaching faculties (Dr. Sowmya K N and Mrs. Anitha P) from the college. A college bus facility was provided for the visit. All students are supposed to have their institution's identity card. The itinerary included information about the students' group. It took around 40 minutes to reach the industry. Mr. Anil J D, Mr. Sanket, Mr. Srinivas, and Mr. Waseem presented about their industry. They formed 3 groups of 12 members and gave pairs of shoes to all for security purposes. Mr. Sanket and Mr. Srinivas demonstrated the types of equipment, process flow involved in processing information using RFID.





Fig: Glimpses of Industrial Visit

Student's perception, industrial visits provide an opportunity for students to learn outside the four walls of classrooms, laboratories, and workshops, to experience topics first hand, which aids in the long-term retention of knowledge, and also in the application of concepts, theories, and knowledge, which ensures competency.

Besides academic benefits, these field trips provide an opportunity for students to advance, be on their own & independent, to improve communication skills, and to make them more accommodating with an improved overall personality. They allow students to engage with individuals outside of their campuses, which aids in the development of social behavior and the formation of a social network. More possibilities to inculcate the habit of traveling alone and in groups, as well as to make pupils more compassionate towards their peers.

During the entire industrial visit, the organization was found to be very cooperative in every walk of its administrative and managerial aspects. The students acquired knowledge. The students found this industrial visit very useful. This visit improved the students' knowledge of various instrumentation equipment presently being used in industry. The students asked several questions and all the experts were happy to satisfy their queries. This visit was full of excitement and enthusiasm. All were of opinion that this kind of company visit in future, would be very useful to students to learn and develop the academic projects in quite effective manner.

27. Report on Blood Donation Camp

Blood Donation camp was organized by Department of Information Science and Engineering in association with NSS Unit, Rotary Gnanakshi club and Rashtrottthana Blood Bank, Bengaluru, in the

Library premises on 15th June 2022 from 9:30 am. Students and Faculties participated actively and donated blood. About total of 187 units of blood collected.

Fig: Dr. J R BANGERA Member, National MSME Board Ministry of MSME Government of India, Mr. Ashwin kumar Software Professional, Rotary Gnanakshi Club Presented Blood Donation Certificate for the Institution.



Fig: Volunteers of Blood donation camp



Fig: Glimpses of Blood Donation camp



Fig: ISE Faculty Members accompanying with Madam Kamala Eswar, Counselor of Bangalore Medical Science Trust



Fig: Witnessing the Event by Principal Dr. Bhimasen Soragaon

DEPARTMENT OF MATHEMATICS

Invited talk

Fourier series, Fourier transforms and Wavelets

On the occasion of the National Mathematics Day on 22nd December 2021, Department of Mathematics of JSSATE, Bengaluru has organized an invited talk on “Fourier series, Fourier transforms and Wavelets” delivered by Dr. P.G Siddeshwar, Senior Professor, Christ University who is an eminent Professor in the field of Mathematics. Dr. B. Umadevi, Assistant Professor greeted all and gave a welcome speech and

introduced the speaker to the august gathering, Dr. C.V. Vinay, Professor and HOD, Department of Mathematics welcomed the Guest by a Bouquet.



Fig : Dr. C.V.Vinay, Professor and HOD inviting Guest



Fig : Third semester Students and Faculty



Fig : Motivational presentation by Professor by P.G.Siddeshwar

The third semester students and faculties participated in the event. Professor highlighted the journey of Ramanujam life, who in spite of adverse circumstances was able to achieve so much and make remarkable contribution to field of Mathematics and who is highly regarded in the Mathematics community. Later in the lecture, he gave presentation on “Fourier series, Fourier transforms and Wavelets” and its applications in signals and systems which was well appreciated by the students. The event concluded around 12.45 pm

Faculty Development Program

Two Days FDP on “Problem Solving using Python Programming”

The Department of Mathematics of JSSATE, Bengaluru has conducted Two Days Faculty Development Program on “Problem Solving using Python Programming” on 29th & 30th June 2022. The program was Inaugurated by Chief Guest Dr. Shivasharanappa S, Professor, GFGC, Bengaluru, Guest of Honor Dr. H.R. Mahdevaswamy, Joint Director, TED, Mysore and presided by Dr. Bhimasen Surgeon, Principal, JSSATE Bengaluru.



Fig: Inauguration of the event



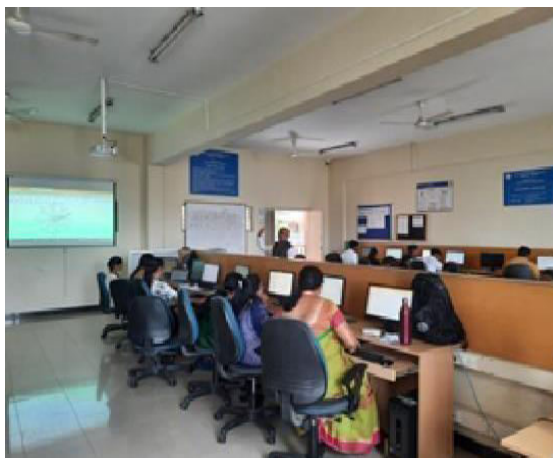


Fig: Snapshots of the event

The Faculty of Mathematics and B.Sc., (Honors) students from various colleges and Universities like Atria Institute of Technology, Bengaluru and Jain University, PES College, Mandya, New Horizon College Bengaluru has attended and benefited from this program.

Outcomes of the FDP:

1. Understand the basic commands of the Python language
2. The simple programs using Python language
3. Program to solve problems pertaining matrices,
4. Differentiation and integration of standard functions
5. Plotting of standard curves and visualization
6. Application and Solution of differential equations

DEPARTMENT OF MECHANICAL ENGINEERING

Events

1. Two Day Workshop on Bringing Potency in Teaching Learning Process 23rd & 24th September 2021

The workshop was formally inaugurated on 23rd Sept. 2021 by Dr. H R Mahadevaswamy, Joint Director, JSSMVP, Mysuru. Dr. Mrityunjaya V Latte welcomed the guests, resource persons and faculty members. Dr. Guruprasad, Professor, Dept. of ISE, delivered his talk on Effective teaching to achieve better results, documents before, during and after the semester, assessing students and teaching accordingly. Dr. H R Mahadevaswamy, Joint Director, JSSMVP, Mysuru addressed the faculty members on various aspects of teaching, its methods, phases, effective teaching, etc. He appealed all the faculty members to adopt suitable teaching methodology to ensure that the results in the courses taught reach 100%.



Fig: Workshop on “Bringing Potency in Teaching Learning Process”

29. A five-day Staff Development Programme (SDP) on ‘Microsoft Excel’ is hence scheduled from 28.06.2021 to 16.07.2021

A five-day Staff Development Program (SDP) on ‘Microsoft Excel’ is hence scheduled from 28.06.2021 to 16.07.2021, in phased manner, for all the non-teaching staff members (office, accounts, examination, placement, library, lab instructors, lab helpers & attenders) of JSSATE, Bengaluru. The program is organized by the Department of Mechanical Engineering. The inauguration of the SDP was held on 28.06.2021 at 3 pm in blended mode. Dr. Dr. H R Mahadevaswamy, Joint Director – TED addressed all the participants and said that the ‘human resources’ plays a significant role in the growth of any organization. This human resource, to be effective, should have necessary qualifications, knowledge and skills. In order to improve these on a continuous basis, he brought out the importance of continuous learning and hence improvement in personal as well as professional life. He advised the participants to

have an open mind for learning and keep aside all the inhibitions since the technologies, approaches and the methods of doing work are changing continuously and rapidly. One has to change and acquire new knowledge and skills to keep abreast of the changing requirements of the profession. About 120 non-teaching staff members have registered for this program and it will be conducted in batches of 25 each for four weeks.

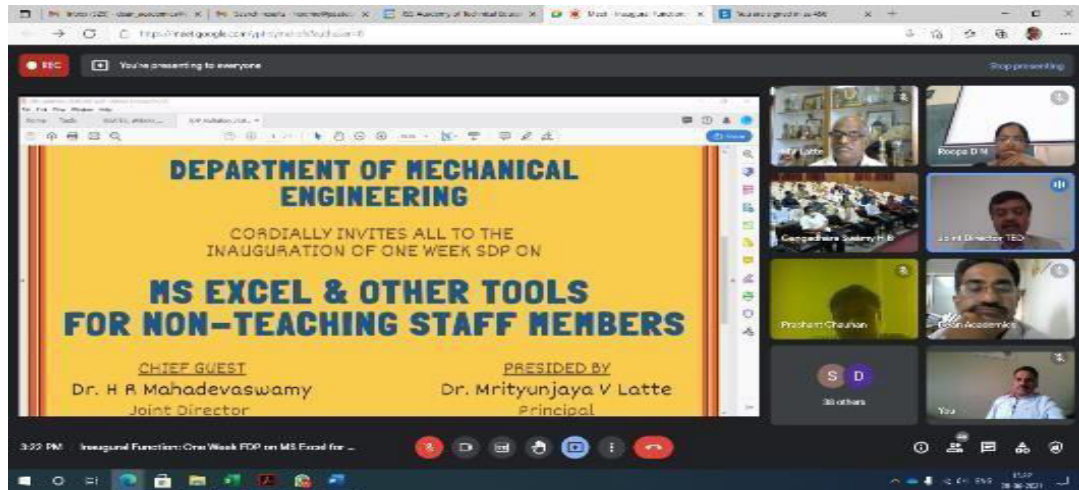


Fig: SDP on 'Microsoft Excel'

Industry 4.0

Brilliant academicians Dr. Narasima Venkatesh Associate Professor of RV institute of Management delivered an experiential lecture on "Industry 4.0: Technological Transformation in Action" on a virtual platform on 12th June 2021. Dr. M V Latte, Principal, JSSATE, Bengaluru highlighted the importance and relevance of the webinar and he congratulated all participants for choosing to learn. Dr. H R Mahadevaswamy, Joint Director, TED, JSSMVP, Mysuru, mentioned evolution and progress in the field Industry 4.0 Dr. Bhimasen Soragoan, Head of the Department, Mechanical Engineering, mentioned about how important it is to keep oneself abreast with the present technology.

1. Webinar on Lost Foam Casting

A webinar on Lost Foam Casting was organized on 10.07.2021 from 2 – 3:30 pm, in association with The Bangalore Chapter of Institute of Indian Foundrymen. Lost foam casting (LFC) is a forming process where polystyrene or co-polymer beads are expanded in an aluminium tool and bonded together to form complete patterns or sections that are assembled into a foam pattern. These pieces are then glued together to form a replica of the final cast component to be made. Mr. Praveen Sinha, President – Operations, M/s. Porwal Auto Components Ltd., Indore delivered the talk. He highlighted the technology, applications, advantages and limitations of the casting method.

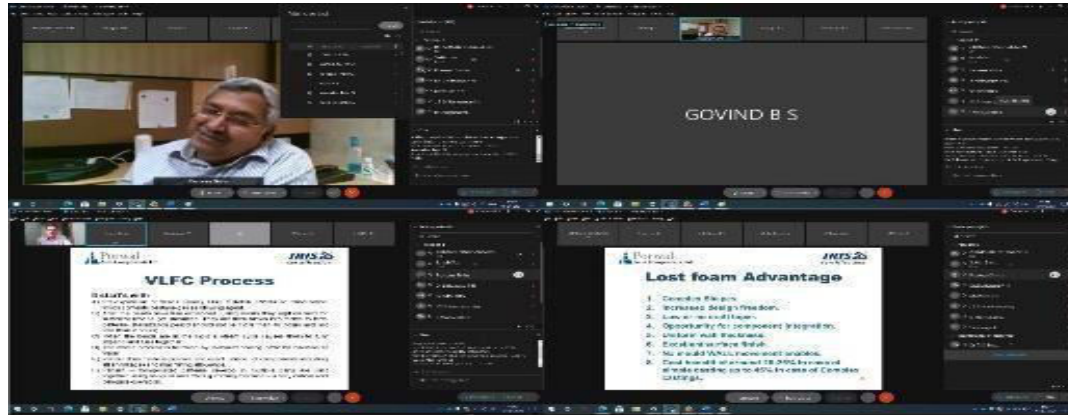


Fig: Webinar on “Lost Foam Casting”

2. Alumni Interaction

Mr. Dinesh Raveendran, Technical Support Engineer - Strategic Procurement (SLP - Supplier Lifecycle and Performance) at M/s. SAP Ariba, delivered the talk on **Ice cream, Orange and Pineapple – The Fundamentals of Failure** on 29.05.2021. He narrated the reasons for failure in the student life with an analogy to having an ice cream, orange and pineapple. He suggested the ways to overcome the failures and how to become a successful in life. He advised his juniors to have dedication at the work, understand one’s strengths and weaknesses. The honesty and communication skills play a vital role in one’s professional as well personal life, he added. Developing passion, love and affection towards the work will definitely help to climb the ladder in the professional life. Over 140 students participated in the interaction.

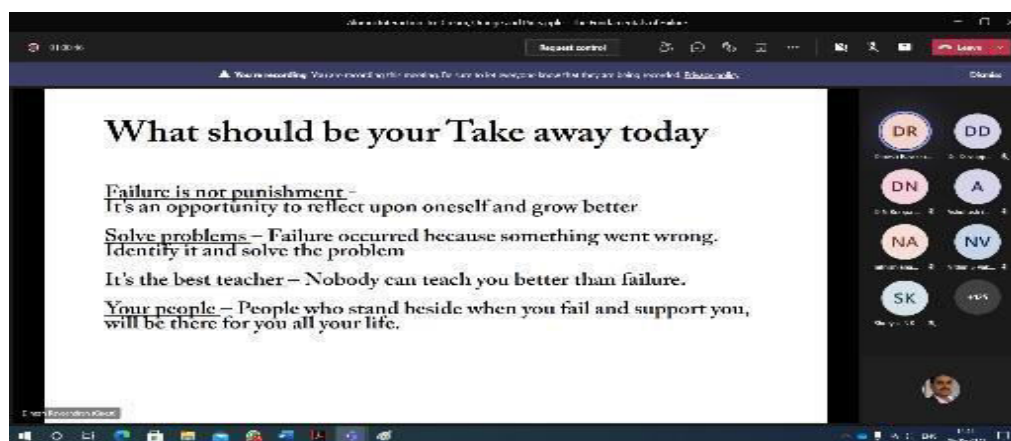


Fig: Talk on “The Fundamentals of Failure”

- Department of Mechanical Engineering organized a webinar on **Development in Design and Automation for Industry 4.0** on Saturday, June 19th 2021. Mr., Vinay S, Manager, Conceptia Konnect delivered the talk.

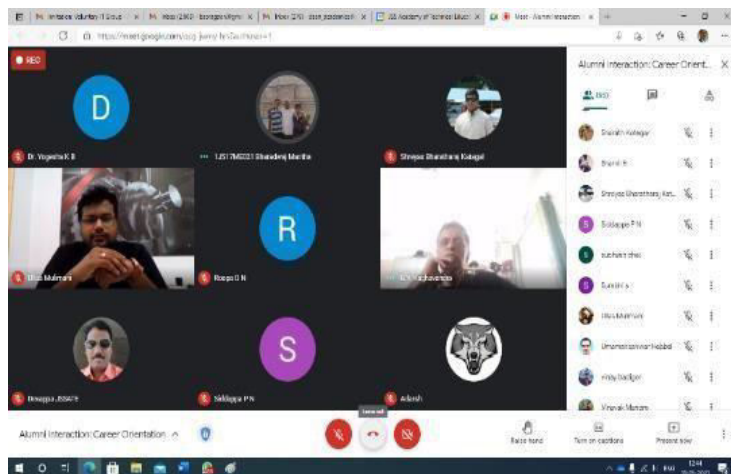
Mr. H S Manjunath, Project Delivery Experts, M/s. Tracey Brunstrom & Hammond Pvt. Ltd., Melbourne, Australia delivered the talk on **Experience and Knowledge Sharing** on 09.06.2021. He highlighted the importance of Mechanical Engineering and its significant role in manufacturing industries. He suggested to his juniors to be strong in the fundamentals which lead to understanding of the modern concepts



delivering the best in their professional life. Acquiring skills such as technical writing, presentation & good communication will fetch good returns in the long run, he added. Some personality development traits he suggested to the students are 'not to take short cuts in life', 'be open minded and outgoing', 'develop good hobbies', 'participate in extracurricular activities', 'make effective use of social networks', etc. Over 92 students participated in the interaction.

Fig: Talk on “Experience and Knowledge Sharing”

Mr. Ullas L M., Senior Executive - Spare parts Inventory & Logistics at Phillips Machine Tools India Pvt. Ltd., Bengaluru delivered the talk on **Career Orientation – Start-up Success & Failure Models** on



19.05.2021. He highlighted about the opportunities available to ME graduates in various areas under Mechanical and Manufacturing domains. He motivated students to dream big whether it is getting a job or starting their own venture. He shared his experience as an entrepreneur and explained the ways for an entrepreneur not to fail. Over 78 students participated in the interaction.

Fig: Talk on “Career Orientation – Start-up Success & Failure Models”

Brilliant academician, eminent medical teacher and speaker of a very high caliber Dr. Vijayalakshmi Balekundri, Prof of Paediatric Cardiology at Bengaluru Medical College & Research Institute delivered a thought-provoking lecture on “Way to Wellness” on a virtual platform on Saturday, 05th June, 2021. Wellness comes from evolving a positive mindset, sticking to a regular exercise regimen, reducing body weight and eating sathvik ahaar. Madam was humble to answer all the questions raised by the participants. Dr. M V Latte, Principal, JSS ATE, Bengaluru introduced the guest to the audience and advised the students to positively imbibe the lessons given by madam. Dr. Bhimasen Soragoan, Head of

the Department, Mechanical Engineering, in his address, mentioned about how important and relevance is the today's topic for students a young generation.

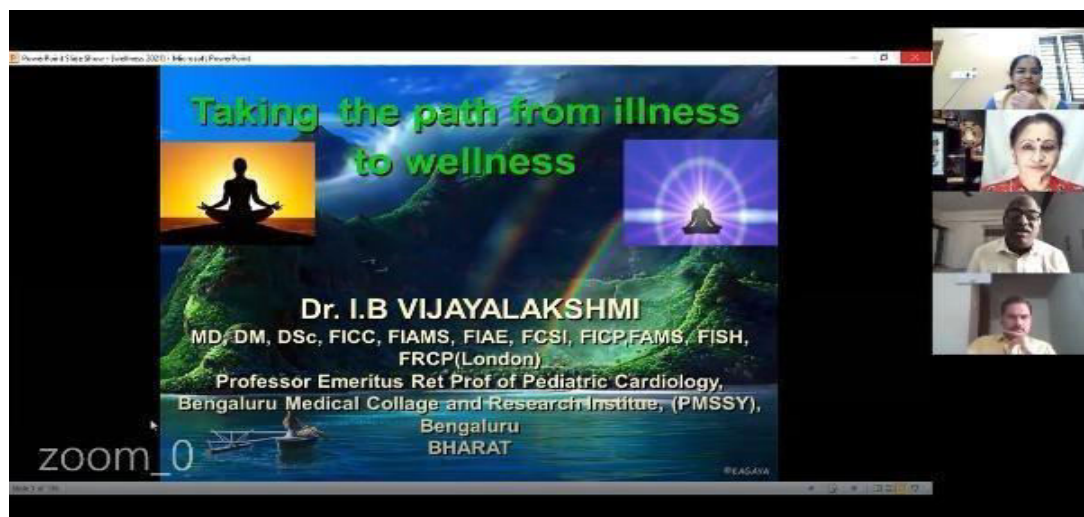


Fig: lecture on “Way to Wellness”

Student Achievements

Best Outgoing Student for the Year 2020-21

Mr. Vinay G., 1JS17ME097 with CGPA 8.84

- Paper published on Optimization of Process Parameters of Ultrasonic Machining, International Journal of Recent Technology & Engineering, Volume-8 Issue-4, November 2019, pp. 8949-8955.
- Placed in: M/s. PRO-SIM as Computer Aided Engineering Intern

Best Students' Projects for the Year 2020-21

- Design and Fabrication of Power Generator for Rural Areas Using Wind Belt Technology by VINAY G (1JS17ME097), YATHISH N (1JS17ME091), SYED AIMAN (1JS17ME080), NAGENDRA A RAIKAR (1JS17ME048), Guide: Mr. Veeresh B R, funded by KSCST Funded, Rs. 7000.
- Additive Manufacturing and Topology Optimization of Front Upright and Rocker Arm in Formula Student Electric Vehicle (FSEV), by ROHITH R(1JS17ME067), S KARTHIGEYAN (1JS17ME068, SACHIN B A(1JS17ME069), SHREYAS B KATAGAL (1JS17ME072), Guide: Dr. Yogesha K B.
- Design and Fabrication of Bicopter by RAJATHESH B C(1JS17ME063), SHIVAYOGI C AKKI (1JS17M E071), RAMA SHIVA R (1JS17ME065), ANAND SHANKAR M (1JS17ME009) Guide: S Kousik.

Department of Physics

About the Department

Department of Physics is well established department in JSSATE, Bangalore with state of art laboratory infrastructure and dedicated faculty and staff to fulfil dream of budding engineers. The department caters the intake of nearly 450 students in each semester. The department is focused to the holistic development of the students and encourages taking innovative assignment within the given time frame. This way student is mingled with peers and come out with solution of problems in unique way. The department also encourages faculty members to actively participate in research and development work by way of publication, presentation of their work in national and international conference and keep themselves updated. The average teaching experience of faculty members is more than 15 years. In both theory and practical classes, students are given individual attention. Faculty members increase healthy interaction with students in both academic and personal matters, which leads to excellent academic performance of the students. The department has a well-equipped Physics Laboratory and very good infrastructure with a total plinth area of around 180 Sq. meters. Department gives special focus to the topic related to respective engineering branch students while delivering the lecture and preparing lecture plan. The department is offering B.Sc.(Honours) Programme from VTU, Belagavi, from the academic year 2021-22

The department of Physics will shortly start PG programme in Medical Physics and Physics as an extension Centre of JSS Science and Technological University, Mysuru. The Department is on way of developing advanced laboratory in the area of Nuclear Physics, Atomic Physics, Computational Physics and Electronics which will cater both UG and PG Students.

Vision

Creating a thrust for research with societal concern by way of clear understanding the fundamentals of science and applying it to the real-time situation.

Mission

- 1.To mould a budding engineer with the finer aspects of the basics of Physics.
- 2.To explore the opportunities to innovate in contributing to the advancement of Science and Technology.

Faculty Members

Sl.	Name	Designation	UG	PG	Ph.D.
1	Dr. Nityanand Choudhary	Professor & Head	B.Sc. (PME)	M.Sc. (Electronics)	Amorphous Semiconductor Physics

2	Dr.Prasanna Kumar S	Professor	B.Sc. (PME)	M.Sc. (Physics)	Nuclear Radiation Physics
3	Dr.Shashidhar R	Associate Professor	B.Sc. (PME)	M.Sc. (Physics)	Condensed Matter Physics
4	Dr.Abhilasha Singh	Assistant Professor	B.Sc. (PME)	M.Sc. (Nuclear Physics)	Liquid crystal
5	Mrs. Sushma K C	Assistant Professor	B.Sc. (PCM)	M.Sc. (Condensed Matter Physics)	Pursuing
6	Mr.Mohan kumara L B	Assistant professor	B.Sc(PCM)	M.Sc(Condensed Matter Physics)	Pursuing
Technical Staff					
1	Mrs. Jyothi H R	Instructor	B.Sc., B.Ed.,		-
2	Mr. Shivamurthy	Lab Helper	I.T.I		-
Supporting Staff					
1	Mrs.Shanthamma C	Attender	PUC		

