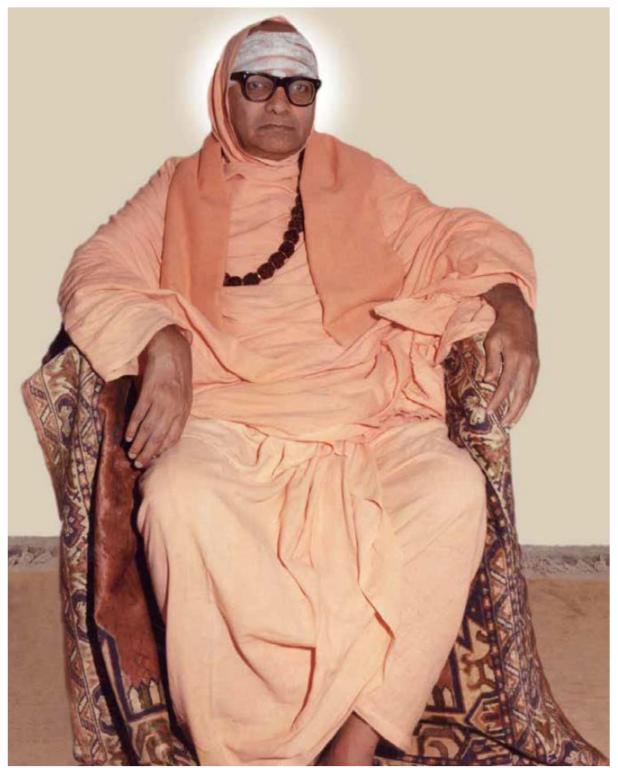
# JSS ACADEMY OF TECHNICAL EDUCATION BENGALURU





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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 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 24<sup>th</sup> 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 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 Bangalore City. The institution is affiliated to Visvesvaraya Technological University (VTU), Belgaum, India.

At present JSSATE, Bangalore has seven Under Graduate and four Post Graduate programs in Engineering along with a post Graduate program in Business Administration. All the Departments have been recognized as "research Centres" from VTU, Belagavi. More than 120 candidates are pursuing research programs at JSSATE, Bangalore. The total strength of students is more than 2850.

JSSATE, Bangalore 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 120 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

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



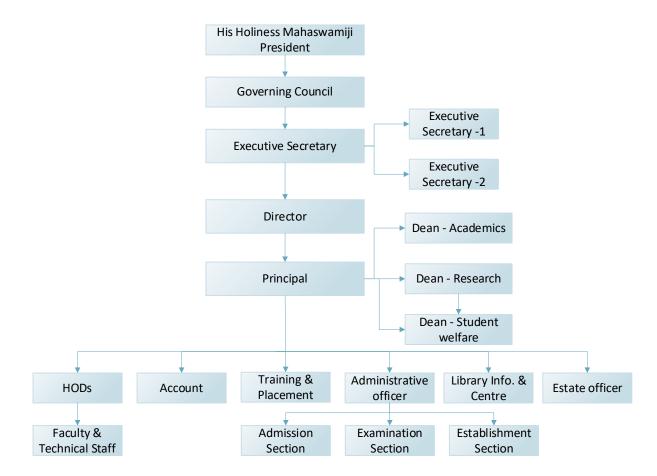
JSS Academy of Technical Education, Bengaluru, has been assessed on QS IGAUGE Methodology 1.2/1.3. by QS IGAUGE rating system.

• 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

SI. No.	Name	Designation
1	His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji President, 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 Hilarian Pushparaj 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-Offico
15	Dr. Poornima N Associate professor, E & C Department, JSSATE, Bengaluru	Member Faculty representative
16	Dr. Mrityunjaya V. Latte 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 meeting, 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 parameter 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 carters 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 the of adjunct/visiting faculty visits. The onus of document and submission of half yearly and annual report of JSSATE is with the division.

Dr. Bhimsen 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 26th December 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 it 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.

# **COURSERA**



Coursera is an American Massive Open Online Course provider founded in 2012 by Stanford University. Currently 75+ million learners, 100+ Fortune 500 companies, and more than 6,400 campuses, businesses, and governments access

courses for learning - anytime, anywhere. Coursera courses last approximately four to twelve weeks, with one to two hours of video lectures a week. These courses provide quizzes, weekly exercises, peergraded and reviewed assignments, an optional Honours assignment and sometimes a final project or exam to complete the course. Courses are also provided on-demand, in which case users can take their time in completing the course with all of the material available at once.

At JSSATE, Bengaluru COURSERA courses were offered to both faculty and students. This helps the students to learn job-ready skills and they were certified with Coursera programs in the latest advanced topics.

#### **Cultural Crew**

# VERVE

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 - 2021**

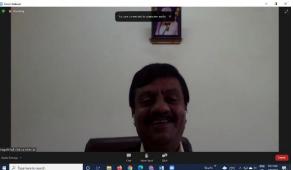
VERVE is a meaningful name given to the Techno-Cultural festival celebrated every year by the students of JSS Academy of Technical Education, Bengaluru. The inauguration of VERVE 2021 was held in online mode to follow the SoPs owing to COVID-19 pandemic.

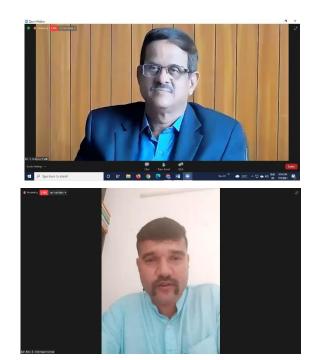
Sri. Ravi D Channannavar, IPS, Superintendent of Police – CID, Bengaluru, inaugurated the fest. In his inaugural speech, he emphasized the importance of education in one's life quoting the Kannada saying, ದುಡ್ಡೇ ದೊಡ್ಡಪ್ಪ..ಆದರೆ ವಿದ್ಯೆ ಅದರಪ್ಪ. He appealed to all the students to put their honest efforts in any of the

works, such as study, sports, cultural activities, etc., to expect the desired outcome. Prof. Nagathihalli Chandrashekhar, the Chief Guest of the function enlightened the attendees about the Indian culture, the importance of reading books in students' lives, and he emphasized the importance of education and how students should concentrate on their studies to achieve success in their lives. Dr. C G Betsurmath, Executive Secretary, JSSMVP, Mysuru, another Chief Guest of the function, opined that the festivals like VERVE will develop in students, qualities such as leadership, crisis handling, team work, etc. apart

from the technical knowledge. Dr. H R Mahadevaswamy, Joint Director – TED, JSSMVP, was the Guest of Honour of the function and opined that the cultural activities in students' life help in overcoming the stress and developing the personality in a positive way. These events inculcate patriotism and sportsmanship among students, he added. Dr. Mrityunjaya V Latte, Principal, presided over the function and mentioned that VERVE has become a platform for the students to acquire and understand the different cultures. The festival is also helping students to exhibit their talents and organizing capabilities. Dr. Bhimasen Soragaon, Dean Academics gave the welcome address. Dr. D V Ashoka, Dean Research proposed vote of thanks. Dr. B P Shivakumar, Dean Students Welfare briefed the attendees about the VERVE fest. About 900 attendees witnessed the function through ZOOM digital platform.







Photos of the Verve'21 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 Swatch 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: 2020-21**



The NSS unit organized the Covid-19 Vaccination Awareness Campaign from 11<sup>th</sup> April 2021 to 12<sup>th</sup> April 2021. The main aim of the campaign was to educate citizens about the Corona Vaccination Utsav, so that all eligible people are vaccinated with zero vaccine wastage.

#### Poster Making Competition on World Environment Day



NSS unit and Yodha Student club organized an intercollegiate poster making competition for II PUC Science, Diploma and Degree students of all streams from 24<sup>th</sup> May to 5<sup>th</sup> June 2021 on the occasion of "World Environment Day". The competition attracted 110 plus students across the disciplines and geographical area. Ms. Maitreyi, Founder of Green Earth Life, announced the winners of the competition.

#### Vaccination Drive - 2021



The Youth Red Cross of JSS Academy of Technical Education, Bengaluru in association with BBMP officials Dr. Sudheendra Rao, Scientific Advisor, Organization for rare diseases India and Dr. Pragna, BBMP Nodal Officer, organized Covid Vaccination camp to provide CoviShield vaccine to the family members of JSSATE, Bengaluru and the people living in nearby localities, on 16<sup>th</sup> April 2021. About 108 members were vaccinated in the camp.



The NSS unit of JSS Academy of Technical Education, Bengaluru in association with BBMP officials, Hemmigepura ward organized Covid Vaccination camp to provide CoviShield vaccine to the family members of JSSATE, Bengaluru and the people living in nearby localities, on 21<sup>st</sup> June 2021. About 1350 members were vaccinated in the camp.



The NSS unit of JSS Academy of Technical Education, Bengaluru in association with BBMP officials organized Covid Vaccination camp to provide CoviShield vaccine to the family members of JSSATE, Bengaluru and the people living in nearby localities, on 28th June 2021. The volunteers of Yodha student club coordinated the vaccination drive. About 250 members were vaccinated in the camp.



The NSS unit of JSS Academy of Technical Education, Bengaluru in association with BBMP officials organized Covid Vaccination camp to provide CoviShield vaccine to the family members of JSSATE, Bengaluru and the people living in nearby localities, on 30th June 2021. The volunteers of Yodha student club coordinated the vaccination drive. About 250 members were vaccinated in the camp.

#### **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., UNNAT BHARAT ABHIYAN 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 11<sup>th</sup> 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. Following this JSSATEB adopted the following 05 villages (Bettanapalya, Bheemanakuppe, Maragondanahalli, Ramohalli, Challaghatta).

#### **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 12<sup>th</sup> 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. Sree Shivarathrishwara Datti 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**

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.

# <image>NTT DataImage: Complete Complet

# **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.

Branch	No of Students registered	No of Students eligible	Total No. of Students Placed	No Of Students with Multiple Offers	Salary Offered (Lowest & Highest)
CSE	137	96	87	40	3 to 16 Lacks 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	

#### Placement Details for Academic Year 2020-21

#### Alumni

JSSATEB Alumni Association is formed with the sole objective of bringing all the JSSATEBians on to a common platform for mutual benefits. The 1<sup>st</sup> 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 1<sup>st</sup> 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 2020-2021

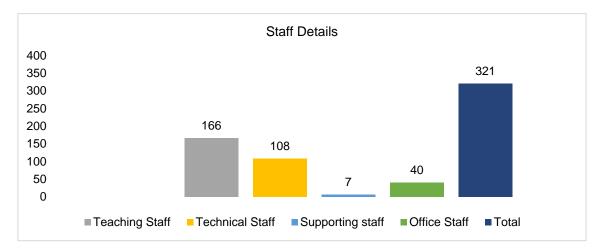
SI. No.	Branch	Sanctioned Intake	CET admitted	SNQ	CQ Admitted	MQ Admitted	PMSSS	Total Admitted
1	Civil Engineering	120	39	6	0	05	02	52
2	Mechanical Engineering	180	05	9	0	02	0	16
3	Computer Science & Engineering	180	81	9	52	47	02	192

4	Electronics & Communication Engineering	180	73	9	08	22	01	113
5	Information Science & Engineering	120	53	7	18	43	01	13
6	Electronics & Instrumentation Engineering	60	17	3	0	11	01	32
7	Industrial Engineering & Management	60	0	0	0	0	0	0
	Total	900	268	43	78	130	07	527

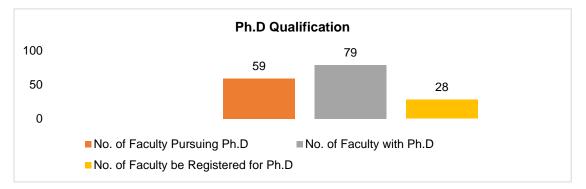
# Overall Admission statistics for the year 2020-21

SI.	UG Program	Intake	No. of Student Admitted
No.	oo riogram	Intake	No. of Student Admitted
1	B.E in Computer Science & Engineering	180	180
2	B.E in Electronics & Communication Engineering	180	113
3	B.E in Information Science & Engineering	90	114
4	B.E in Mechanical Engineering	180	15
5	B.E in Civil Engineering	120	44
6	B.E in Industrial Engineering & Management	60	02
7	B.E in Electronics & Instrumentation Engineering	60	28
8	Master of Business Administration (MBA)	60	54
	PG Program		
SI.	Specialization	Intake	No. of Student Admitted
No.	operated	intarto	Horor of ottadont Admittod
1	M.Tech in VLSI Design & Embedded Systems	18	01
2	M.Tech in Thermal Engineering	09	01

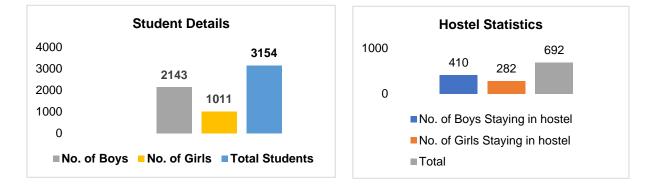
#### **Staff Details**



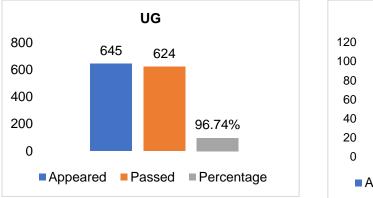
# Ph. D qualification

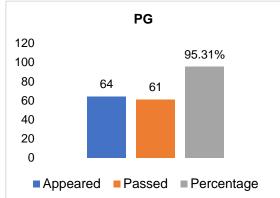


#### **Student Details**



#### **Result Analysis**





#### Statistics of the conference, workshop and seminar conducted by the Department

SI. No.	Department	Webinar / FDPs/ Workshop (Nos.)
1	Computer Science and Engineering	23
2	Information Science and Engineering	28
3	Electronics and Communication Engineering	27
4	Electronics and Instrumentation Engineering	10
5	Mechanical Engineering	14
6	Civil Engineering	6
	Total	108

# Statistics of the conference, workshop and seminar attended by the faculty members.

SI. No.	Department	Webinar / FDPs/ Workshop/NPTEL/Coursera/STTP/STC (Nos.)
1	Computer Science and Engineering	81
2	Information Science and Engineering	100
3	Electronics and Communication Engineering	146
4	Electronics and Instrumentation Engineering	18
5	Mechanical Engineering	357
6	Civil Engineering	114
7	Industrial Engineering and Management	11
8	Chemistry	57
9	Mathematics	40
	Total	924

# **Research Highlights**

• Funded Projects

SI. No.	Name of the Faculty	Title	Funding Agency	Amount (Rs.)	
1	Dr. Mallikarjunaswamy S Dr. Siddesh G K	Establishment of Renewable Smart Grid Laboratory	VGST under K-FIST L2, 25 <sup>th</sup> September 2020, For the period of 02 years, (2020 – 2022)	30 lakhs	
2	Dr. Naidila Sadashiv	-	VGST	5 lakhs	
3	Dr. Gowresh S S Dr. K B Yogesha	Students club: Tychon Motor Sports	AICTE, Newdelhi	1 lakh	
Total Amount (Rs.)					

# Consultancies Executed

# Department: Industrial Engineering and Management

SI. No.	Faculty Name	Title	Duration	Client Name and Address, Ph. No	Amount (Rs.)
1	Dr. Swamy D R U. Krishnaprasad Manohar	Safet y Audit	18-02-2021	M/s. P J Margo Pvt Ltd Plot No. 3A, 3B, 3C (Part) Antharasanahalli Industrial Area, Tumakuru – 572106 Ph: 0816-2211160	64,900-00
2	Dr. Swamy D R U. Krishnaprasad	Safet y Audit	8-6-2020 to 10-6-2020	M/s. Sigma Aldrich Chemicals Pvt., Ltd., Bengaluru (MERCK) Plot No-12, Bommasandra Jigani Link Road, Bommasandra Industrial Area, Bengaluru – 560099 Ph.: <u>080-662 19400</u>	1,06,200-00

# **Department: Civil Engineering**

SI. No.	Faculty Name	Title	Client Name and Address, Ph. No	Amount (Rs.)
1	Dr. Shashikumara S R and Abhishek R	Non-Destructive Testing	Suraj Builders Pvt. Ltd., Mysuru & M/s Karnataka Redy Con Mix, Mysuru	10000-00
2	Dr. Shashikumara S R and Abhishek R	Foundation drawing and column marking	Er. Ullas A No.179/1, sunkadakal village, kottur taluk, Ballari district- 583134	2500-00
3	Dr. Santosh B S	Concrete Cubes Compressive strength	Mr Harish D S #146, South end road,Jayanagar, Banglore -69	1062-00

4	Shashikumara S R and Abhishek R	Rebound hammer test	M/S KRC Groups #8, Industrial area, Kubalgudu, Bengaluru - 74	3304-00
5	Dr Santhosh B S	Concrete Cubes Compressive strength	Mr Vinay Rajarajeshwari Layout, Nagadevanhalli, Bangalore - 56	531-00
6	Abhishek R and Shashikumara S R	Planning and scheduling of construction activities for residential project	Er Shivashankar Founder Rathna Construction, Dommasandra, Bangalore 562125	2000-00

# • MoU signed

SI. No.	Department	No. of MoU signed
1	Computer Science and Engineering	06
2	Information Science and Engineering	02
3	Electronics and Communication Engineering	01
4	Civil Engineering	04
5	Chemistry	02
	Total	15

### • Award of Ph.D.

SI. No.	Department	No. of Ph.D. awarded
1	Information Science and Engineering	01
2	Electronics and Communication Engineering	05
3	Mechanical Engineering	03
4	Civil Engineering	02
5	Industrial Engineering and Management	03
	Total	14

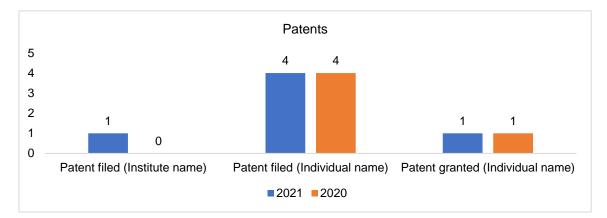
#### • Patents

- Total No. of Patents Filed: 11
- Total No. of Patents Granted: 03

SI. No.	Department	No. of Patent Filed	No. of Patent Granted
1	Computer Science and Engineering	01	01
2	Information Science and Engineering	02	-

3	Electronics and Communication Engineering	05	02
4	Electronics and Instrumentation Engineering	03	-
5	Mechanical Engineering	02	-
	Total	13	03

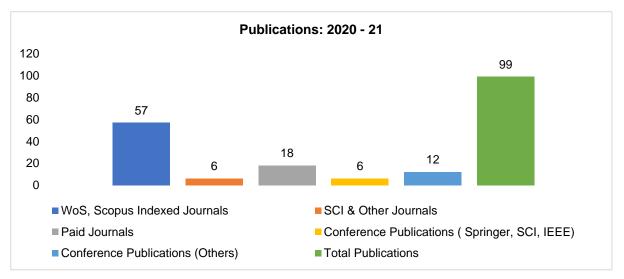
# Patents



## **Publication Statistics**

SI. No.	Program	No. of Publications (Conference, Scopus, WoS & Others etc.,
1	Computer Science and Engineering	14
2	Information Science and Engineering	31
3	Electronics and Communication Engineering	23
4	Electronics and Instrumentation Engineering	21
5	Mechanical Engineering	34
6	Civil Engineering	12
7	Industrial Engineering and Management	11
8	Chemistry	19
9	Mathematics	18
	Total	183

### Publications



# Collaborations

# Academic and Research MoU Signed between August 2020 - July 2021

SI. No.	Name of the collaborating Institution/ Industry	MOU Signed Date							
	Department of Chemistry								
1JSS College of Pharmacy, Mysuru07.9.2020									
	Department of Information Science and Engineering								
2	M/s HEB Exports Pvt. Ltd	25.01.2021							
3	3 M/s TNS India Foundation 16.2.								
	Department of Civil Engineering								
1	M/s Clear Water Dynamics Pvt. Ltd.	01.10.2020							
2	M/s Klarheit Valuers and Engineering Services Pvt Ltd	01.10.2020							

#### Fee structure for the Academic Year 20-21

# UG Programs

				CE	г		COMED-K			Uni. Fee       (Rs.)         (Rs.)       (Rs.)         41880       2136         41880       2136         41880       2438         41880       2438         41880       2438         41880       2438         41880       2438         41880       2438	MENT
SI. No.	UG Program	Duration	Tuition Fee (Rs.)	College & Uni. Fee (Rs.)	Total (Rs.)	Tuition Fee (Rs.)	College & Uni. Fee (Rs.)	Total (Rs.)	Tuition Fee (Rs.)	Uni. Fee	Total (Rs.)
1	Civil Engg.	4 Years	58806	42380	101186	-	-	-	171760	41880	213640
2	Mechanical Engg.	4 Years	58806	42380	101186	-	-	-	171760	41880	213640
3	Computer Science & Engg.	4 Years	58806	42380	101186	20196	41880	243840	20196	41880	243840
4	Electronics and communication Engg.	4 Years	58806	42380	101186	20196	41880	243840	20196	41880	243840
5	Information Science & Engg.	4 Years	58806	42380	101186	20196	41880	243840	20196	41880	243840
6	Electronics and Instrumentation Engg.	4 Years	58806	42380	101186	-	-	-	58806	42380	101186
7	Industrial Engineering and management	4 Years	58806	42380	101186	-	-	-	58806	42380	101186

# PG programs

				PGCET			MGNT.	
SI.	PG Program	Duration	Tuition Fee	College & Uni. Fee	Total	Tuition Fee	College & Uni. Fee	Total
No			(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
1	MBA	2 Years	50,000	49,430	99430	50000	75900	125900
2	M.Tech	2 Years	60000	36130	96130	60000	36130	96130

#### Hostel Fees for the Academic year 2020-21

Hostel fee details (Girls & Boys)	<ul> <li>Rs. 1,42,500 per year for single sharing basis, Girls Hostel.</li> <li>Rs. 82,500 per year for three sharing basis, Girls Hostel.</li> <li>Rs. 83,000 per year for Boys' Hostel</li> <li>Rs. 1,10,000 per year for single sharing, Boys Hostel</li> </ul>
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#### **Student Achievements**

#### **University Ranks** •

Six students of JSS Academy of Technical Education (JSSATE), Bengaluru have secured ranks in the recently held VTU examinations.





**RANK: 02** 

B.E. Computer Science & Engineering **RANK:05** 

**SNEHA P R** 



Instrumentation Engineering

AFIFA PARVEEN B.E. Electronics &

Instrumentation Engineering **RANK:04 RANK: 10** 







**BHUMIKA S** B.E. Industrial Engineering & Management **ASWIN KRISHNA S** B.E. Industrial Engineering & Management

**RANK:06** 

**RANK:08** 

#### Hackwell 2.0 •



Hackwell 2.0 is a 48-hour long virtual hackathon, powered by M/s Honeywell Technology Solutions, was held on 02-04 June 2021. M/s Honeywell Technology Solutions will provide mentors to guide the teams and judge the solutions developed during the event.

The team Hackstreet Girls, Aditya from Information Science and Engineering, Udeshya, Gunashree C, Shreelakshmi Kiran, Sowmya A R, Rachana T, Varun S Athreya from Computer Science and Engineering, secured 3rd position in the Hackwell 2.0 event. for the application "Android Mobile application to populate firefighting equipment inventory".

SI. No	Project Title	Faculty Name	Students Name	Project Reference No	Amount (Rs.)
1	Non-Invasive Glucose and Cholesterol Monitoring Device	Mrs. Shubha B, Asst. Prof., Mrs. Anuradha M G, Asst. Prof., Dept. of ECE, JSSATEB	Ms. Suprada H S Ms. Prathiksha R Ms. Shrilaxmi Dixit Ms. Sumedha C	44S_BE_0196	6000.00
2	Keller: Indian Sign Language Gesture to Text and Speech Assistant	Ms. Gunasagari G S, Asst. prof., Dr. Poornima N, Associate Prof., Dept. of ECE, JSSATEB	Ms. AbhijnaYaji Mr. Achuth M Ms. Anisha Maria Dsilva Ms. Chethana S R	44S_BE_1458	7000.00

#### **Student Projects** •

3	Smart Meter for Water Utilization Using lot	Dr. Mallikarjunaswamy S, Associate Prof., Dr. Siddesh G K, Associate Prof., Dept. of ECE, JSSATEB	Mr. Sriramulu H Mr. Abhishek. M Mr. Deepak. S Mr. Yasin Qureshi.	44S_BE_1465	8000.00
4	Cloud Based Centralised Smart Cart and Contactless Billing System	Mr. Mahendra H N, Asst. Prof., Mrs. Neela A G, Asst. Prof., Dept. of ECE, JSSATEB	Mr. Chandan B Nooli Mr. Hrishikesh M Mr. Havish M V Mr. Kruthik N	44S_BE_4085	5500.00
5	Design and Fabrication of Automatic Dry Waste Segregation Machine	Dr. Gowreesh S S, Assoc. Prof., Dept. of ME J S Srikantamurthy, Asst. Prof., Dept. of ME	Bhat Goutam Venkatesh, Mahadeva R., Kiran K., Vamshee G S	43S_BE_3663	6500.00
Total Amount (Rs. )					

 The Tychon Motor Sports, student club received funding amount of Rs. 1 Lakh, from AICTE under Scheme for Promoting Interests, Creativity and Ethics among Students (SPICES) on 18 January 2021 under the guidance of Dr. K B Yogesha and Dr. Gowreesh S S.

#### **Farewell Function of 2021 Graduating Batch**



A Farewell Program to the 2021 Graduating batches of B.E., M.Tech and MBA was organized by JSS Academy of Technical Education, Bengaluru on 04.08.2021 at 5pm in its premises at JSS Campus, Uttarahalli-Kengeri Main, Bengaluru – 560060. This program was organized as per the COVID-19 protocol in blended mode.

**Dr. Pratima Murthy**, Director, NIMHANS, Bengaluru was one of the Chief Guests and delivered farewell address. She emphasized the importance of social networking and connecting and advised students to be socially connected with their parents, teachers, friends and relatives. 'Earn money with hard work and honesty but not chase the money' was her slogan to the students. She humorously said that the outgoing batch can be termed as COVID graduates. She recalled the Japanese term 'Sayonaara' to bid adieu the graduating batch. **Dr. B Prabhudeva**, KAS, Member, KPSC was another Chief Guest. In his address, he appealed to the students to owe and respect their parents & teachers as they have sacrificed a lot in grooming the future of the students. **Dr. H R Mahadevaswamy**, Joint Director – TED, JSSMVP, Mysuru addressed the students as guest of honour. He suggested the graduates to be studious and honest to climb the professional ladder. The digital technology shall be used to improve the efficiency in the professional life, he opined. He appealed to the students to give back to the society, their institution and to their juniors.

Dr. Mrityunjaya V Latte, Principal, gave the presidential address. Dr. D Jayadevappa welcomed the gathering. Dr. B P Shivakumar & Dr. Rekha P M introduced the chief guests to the gathering. Dr. Siddesh G K proposed vote of thanks. Rank holders for the academic year 2019-20 and the best performers and best project awardees of the outgoing batch were felicitated.

# D E P A R T M E N T A C H I E V E M E N T S

# ANNUAL REPORT 2020-21



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

#### About the Department

The Department of Computer Science and Engineering was established in the year 1997, with the objective of imparting quality education in the field of Computer Science and Engineering. The Program is accredited by NBA with current in take of 180 Students. The department has to its credit a team of qualified, experienced and dedicated faculty, whose main aim is to equip students with the knowledge and expertise to grow professionally and contribute significantly to the society.

The department is recognized as a research Centre by Visvesvaraya Technological University, Belagavi. Faculty members are actively involved in publishing research paper in various National /International Journals and Conferences. The department regularly organizes Student development programs, Faculty development programs, Conferences, and Workshops. A continuous interaction with industries is established through MOUs, Industry visits, and Internships. Department has a membership with professional bodies and conducts various technical activities. The Department has a technical forum called INiT (Innovation in Technology), student clubs NCrypt and Split\_Train\_Test which is responsible for research and development of innovative ideas. Students are consistently getting ranks in university exams. They are encouraged to participate in various co-curricular and extra-curricular activities and have won prizes. Training and Placement division provides full training and placement assistance to students in all areas of professional education. Around 90% of our students get placed in reputed companies. Students have exhibited good performance in competitive examinations. The department Alumnus are serving in various positions in reputed companies like Amazon, Adobe, Accenture, Wipro Technologies, Cognizant Technologies. With rapidly evolving technology and continuous need for innovation, it has been the department's ongoing endeavor to produce quality engineering graduates.

#### Vision

To be a distinguished academic and research Department in the field of Computer Science and Engineering for enabling students to be highly competent professionals to meet global challenges.

#### Mission

- 1. Impart quality education in Computer Science and Engineering through state-of-the art learning environment and committed faculty with research expertise.
- 2. Train students to become the most sought-after professionals in the field of Information Technology by providing them strong theoretical foundation with adequate practical training.
- 3. Provide a conducive environment for faculty and students to carry out research and innovation in collaboration with reputed research institutes and industry.

4. Inculcate human values and professional ethics among students to enable them to become good citizens and serve the society.

#### **Program Educational Objectives**

- PEO 1: Graduates shall possess essential skills to adapt to emerging technologies & environment to solve real world problems.
- PEO 2: Graduates shall have required technical competency for pursuing higher studies & Research.
- PEO 3: Graduates shall have essential communication and managerial skills to become competent professionals and entrepreneurs.

#### **Program Specific Objectives**

- PSO 1: Apply the principles of Basic Engineering Science and acquire the hardware and software aspects of Computer Science.
- PSO 2 Solve the real-world problems using modelling for a specific Computer system and architecture.
- PSO 3 Ability to design and develop applications using various software and hardware tools.
- PSO 4 Exhibit the practical competence using broad range of programming languages.

#### **Admission statistics**

Year	Sanctioned Intake	Actual Admitted	CET (Opening & Closing Rank)
2020-21	180	180	6020 - 142336
2019-20	180	185	6554 - 12281
2018-19	180	193	4824- 9741

#### **Placement statistics**

Year	No. of students placed		
2020-21	81		
2019-20	87		
2018-19	67		

#### **Accreditation Status**

• The Department is accredited by NBA, New Delhi, for the period of three years from 2020 -2023, till 30.06.2023

# Faculty Cadre

No. of Faculty members	Professor	Associate Professor	Assistant Professor
25	02	03	20

# Faculty Members

SI. No.	Name	Designation	UG	PG	Ph.D.
1	Dr. Prabhudev Jagadeesh	Professor	B.E (CSE)	M.Tech. (SE)	Digital Image Confidentiality: A novel Perspective
2	Dr. Naveen N.C	Professor	B.E(CSE)	M.E (CSE)	An Analytical Approach for Real Time Intrusion Detection Using Machine Learning Paradigm
3	Dr. P.B. Mallikarjuna	Associate Professor	B. E (ECE)	M.Tech. (CE)	Computer Vision in Precision Agriculture: A Case Study on Tobacco Crop
4	Dr. Nagasundara K B	Associate Professor	B.Sc. (PCM)	M.Sc. (Mathematics), M. Tech (Computer science and Technology)	Biometric indexing
5	Dr. Naidila Sadashiv	Associate Professor	B.E(CSE)	M.Tech (CSE)	Optimized Resource Allocation Strategies in Cloud Environment
6	Mrs. Snehalatha N	Assistant Professor	B.E (CSE)	M.Tech (CNE)	-
7	Mrs. K S Rajeshwari	Assistant Professor	B.E(CSE)	M.Tech (CNE)	-
8	Mrs. B H Bhavani	Assistant Professor	B.E(CSE)	M.Tech (CNE)	-
9	Ms. K V Shanthala	Assistant Professor	B.E(CSE)	M.Tech (CNE)	-
10	Mr. Sharana Basavana Gowda	Assistant Professor	B.E(CSE)	M.Tech (CSE)	-
11	Mrs. Pooja H	Assistant	B.E(CSE)	M.Tech (CSE)	-

		Professor			
12	Mr. Manjunath B Talawar	Assistant Professor	B.E(CSE)	M.Tech (CSE)	-
13	Mr. Niranjan C Kundur	Assistant Professor	B.E(ECE)	M.Tech (CSE)	-
14	Mrs. Savita S	Assistant Professor	B.E (CSE)	M.Tech (CSE)	-
15	Mrs. Shweta S Kaddi	Assistant Professor	B.E (ISE)	M.Tech (CSE)	-
16	Mr. Pradeep H K	Assistant Professor	B.E (CSE)	M.Tech (CSE)	-
17	Mr. Sreenatha M	Assistant Professor	B.E (CSE)	M.Tech (SE)	-
18	Mr. Abhilash C B	Assistant Professor	B.E(CSE)	M.Tech (SE)	-
19	Mr. Renuka Rajendra B	Assistant Professor	B.E(ISE)	M.Tech (CSE)	-
20	Mr. Rohitaksha K	Assistant Professor	B.E(CSE)	M.Tech (NIE)	-
21	Mrs. Rashmi B N	Assistant Professor	BE (CSE)	M.Tech (CCT)	-
22	Dr. Prasad M R	Assistant Professor	B.E(CSE)	M.Tech (CSE))	Design and Development of Efficient Algorithms for Iris Recognition System for Different Unconstrained Environments
23	Mrs. Renukamba P	Assistant Professor	B.E (E & C)	M.Tech (CSE)	-
24	Mr. Vikhyath K B	Assistant Professor	B.E(CSE)	M.Tech (CSE)	-
25	Mrs. Ranjitha S R	Assistant Professor	B.E (CSE)	M.Tech. (SE)	-

# **Technical Staff**

SI. No.	Name	Qualification	Designation
1	Mr. H.B.Gangadhara Swamy	B.E, M.E	System Analyst
2	Mrs. Nethravathy. S.B		Foreman
3	Mrs. Geetha.B	DCS, B.Sc.(IT), M.Sc (IT)	Programmer
4	Mr. Santhosh.T.E	DCS, B.Sc. (IT)	Instructor
5	Mr. Nagendra Swamy. M	ITI, B.Sc. (IT)	Instructor
6	Mr. Ashwin Kumar	ITI, B.Sc. (IT)	Instructor
7	Mrs Pavithra M S	DCS	Instructor
8	Mr. Anand.B	B.E,	Instructor
9	Mr. Chennabasappa	DCS	Instructor
10	Mr. Manuraj.L	DCS	Instructor
11	Ms. Vidya.A.V	DCS	Instructor
12	Mr. Shreyas. A. K	DCS	Instructor

## Supporting Staff

SI. No.	Name	Qualification	Designation
1	Mr. Mahesh H P	ITI	Lab Helper
2	Mr. Raju S	ITI, DEC	Lab Helper
3	Mr. Dileep Kumar S	ITI	Lab Helper
4	Mr. Sunil B	ITI	Lab Helper
5	Mr. Basava Rajendra Prasad	SSLC	Attender

# **Departmental achievements**

- No. of MoUs signed: 10
- Top job offers Adobe, Mcafee, American Express, One Direct, Betsol, Amazon, Increase in Paid Internships INTEL, SAMSUNG, BETSOL, One Direct, Mcafee, American Express

- Provided COURSERA Courses to 300 participants with more than 4000 Certificates
- The department is a Member of Hack the box, Code for Cause

# **Events organized**

SI. No.	Events	Date	Name & Organization of Resource person
1	Webinar on Reinventing business with IoT	15/05/2021	Mr. Akshat Swarup Mercedes Benz, India
2	Internship, Placement Preparation and Career Planning	14/05/2021	M/s. TEQUED LABs, Bengaluru.
3	Computer Science Skills Awareness Program	13/05/2021	M/s. TEQUED LABs, Bengaluru.
4	Seminar on "Beyond Programming Systems Appling Human- Centered Computing Principles"	24/04/2021	Mr. Aneesh Tarun Ryerson University, CANADA
5	Seminar on Debunking Relationships	20/02/2021	Mr. Shashank Nagesh Co-Founder and CEO, webtrigon Inc, Bengaluru.
6	AICTE Sponsored Faculty Development Program on "Block Chain" (ATAL)	22/01/2021	AICTE Training and Learning Academy Programs
7	Building Platform Independent Games using JAVA Script	10/12/2020	Ms. Ganga Code for Cause, Bengaluru.
8	Disciplined student to a successful professional	19/11/2020	Ms Preethi Director SRE and Big Data Operations, Fidelity Investments
9	Database Application Development	12/11/2020	Mr Chethan Anand CEO and Founder, Newfound Systems
10	Leadership and Management – Early Steps after Graduation	07/11/2020	Ms Tanu Das Business Development Manager, Zensor Technologies, RPG group, Johannesburg, South Africa

## Webinars

SI. No	Webinars	Date	Name & Organization of Resource person
1	Applications of Digital Electronics in Industries	23/10/2020	Mr. Ganesh Daivajna Founder Partner, AchintyoEngg LLP
2	Importance of Network Security and IT Technologies	22/10/2020	Mr Rudresh Babu Assistant Consultant, TataConsultancy Services
3	Cloud Native	17/10/2020	Mr Arun Srinivasan Developer at SAP Labs.

4	Applications of Analog and Digital Electronics	15/10/2020	Dr. Rajath Vasudev Murthy Associate Professor, Dept of E&C, BMSCE
5	The Next Gen Data Scientist	29/09/2020	Mr Karthik Pricing Analytics, SME at Amazon
6	Networks and Cyber Security	24/09/2020	Dr. Gururaj H.L ACM Distinguished Speaker, Faculty at Vidyavardaka College of Engg.
7	Applications of SAN in Data Centers	24/09/2020	Dr. Ashok Kumar Associate Professor, Dept of CSE, RVCE
8	Applications of Discrete Mathematical Structures	18/09/2020	Mr. Rama Badrinath Freelance Data Scientist
9	Campus to Corporate – How to upskill as a Software Developer after College	19/08/2020	Mr. Suman De SAP Labs India
10	Introduction to IoT Solutions – Market, Applications and Impact	18/07/2020	Mr. Ajit Sarnaik Chief Architect, Cognito Networks
11	Big Data Processing using Apache Spark	11/07/2020	Mr. Prashanth K Hebbar Senior Software Engineer, Microsoft
12	Entrepreneurship Ecosystem	11/07/2020	Mr. Mahadesh V Scientist F Director STPI, Bengaluru
13	Introduction to search engines	10/07/2020	Ms. Vibha Valsan Technical Product Manager, Azure Commerce, Redmond Washington, USA
14	Cyber Security and Trends	23/05/2020	Mr. Suraj Shirolkar Principal Engineer in Security, DELL
15	How to get Hired	22/05/2020	Software Developer at Headspin
16	Cyber law and Forensics	21/05/2020	Dr. Manish Kumar Associate Professor, MSRIT
17	Applications of Microcontroller in Real world	16/05/2020	Mr. Satish Intel technologies
18	IOT possibilities in digital transformations	05/06/2021	Mr. Vishwanath, Vice President, Reliance Jio Infocomm Ltd.

#### **Faculty achievements**

- Dr. Naveen N C is elevated as IEEE Senior Member from Feb 2021
- The soil texture classification software product developed by Mr.Pradeep H K has been certified by ICAR - IISWC (Ministry of Agriculture, Govt. of India), Research Center, Sunabeda, Koraput, Odisha, India.
- Mr. Pradeep H K has received CERTIFICATE OF ACHIEVEMENT for being under Top 300 applicants under Agri India Hackathon, **ICAR IARI**, Ministry of Agriculture & Farmers' Welfare, Govt. of India.
- Ms. Shanthala KV worked as a member of the 'Smart Village and Agriculture' Working Group under the Telecommunication Engineering Centre, a national standardization body for telecommunication in India. Her contribution towards the technical report on "IoT/ICT Enablement in Smart Village and

Agriculture" published by TEC was appreciated by the Ministry of communications, Government of India

#### **Publications**

- P B Mallikarjuna, M Sreenatha, S Manjunath and Niranjan C Kundur, Aircraft Gearbox Fault Diagnosis System: An Approach based on Deep Learning Techniques, Volume 30, Issue No.1, 2020, Journal of Intelligent systems, DOI: <u>10.1515/JISYS-2019-0237</u>
- Pradeep H.K. Jasma Balasangameshwara, M.S. Sheshshayee, K. Rajan and Prabhudev Jagadeesh, Irrigation Practices and Soft Computing Applications: A Review, Statistics and Applications, Volume 19, Issue No. 2, 2020, Society of statistics and computer applications
- Pradeep H K, Jasma Balasangameshwara, K Rajan, Prabhudev Jagadeesh Soil Moisture based Automatic Irrigation System to Improve Water Productivity, Journal of Agrisearch, Volume 7, Issue 4, Society for upliftment of rural economy
- Pradeep H.K., Jasma Balasangameshwara, K. Rajan, Madhu, M., Archana, B.K. Automation of USDA Triangle Soil Texture Classification Using Finite State Machine: A Novel Conceptual Modeling Approach, Statistics and Applications, Society of statistics and computer applications
- Rohitaksha K, J Mohan, Shwetha M, Vineeta V, Garur, Karthik A, A B Rajendra, An improved Approach for Eliminating the Loop in Hybrid Software Defined Networks Using Modified Bellman-Ford Algorithm, Journal of Interconnection Networks, World Scientific
- Manjunath B. Talawar, Anirudh, Kiran, G., Narayana Raj, Food Crisis- How Artificial Intelligence and Machine learning Are Solving humanity's Greatest Challenge—A Review, Journal of Computational and Theoretical Nanoscience, DOI: https://doi.org/10.1166/jctn.2020.9005, American Scientific Publishers
- P B Mallikarjuna, D S Guru, Selective Harvesting of Tobacco Leaves: An Approach based on Texture Features, Statistics and Applications, Society of Statistics and Computer Applications
- K.S Rajeshwari, Sumithra Devi, A Survey on Various Fault Tolerance Deployment Mechanisms In Wireless Sensor Networks, International Journal of Advanced Research http://dx.doi.org/10.21474/IJAR01/12197 ISSN: 2320-5407
- Pradeep H K, Jasma Balasangameshwara, K Rajan, Archana B K, Soft Computing based DECEL Model for Optimization of Water Usage in Irrigation Management, Statistics and Applications, Society of Statistics and Computer Applications
- P B Mallikarjuna, D S Guru and Shadaksharaiah C, Ripeness Evaluation of Tobacco Leaves for Automatic Harvesting: An Approach Based on Combination of Filters and Color Models, ISBN 978-981-16-1680-8 https://doi.org/10.1007/978-981-16-1681-5\_13, Springer Nature

#### Patent

Faculty	Title of the patent	Date of filing	Date of Publishing	Date of Grant
Dr. Naveen N C Wild life intrusion detection System empowered with Artificial intelligence		2-Jan-2021	1-Mar-2021	15-Apr-2021
Ms. Shanthala K V An Apparatus for Interactive Ms. Shanthala K V Information Exchange through Machine Learning		1-May-2021	-	-

## **Students Achievements**



Ms. Sneha P R (1JS16CS102) has secured V Rank.

#### **Co-Curricular activities**

SI. No.	Student Name	Achievements & Recognition
1	Shanthanu A	Secured 3 <sup>rd</sup> place in "TECHNOFREAKS" – online technical quiz on 7 <sup>th</sup> July 2020 organized by walkyourskills
2	Rachana T Gunashree C Soumya A R Shreelakshmi Varna kumar R V	Completed an internship with M/s Manleo Designs from April 2020 to December 2020
3	Manoj A M Vismitha N V Keerthan R Harshitha L Aishwarya B P Dhruva V Sunidhi A G Sanjana R K Aishwarya R Monica V	Completed the Internship in "Web Development" from M/s Princeton Smart Engineers from 13.1.2020 to 9.2.2020

4	Manikanta B	Secured 1 <sup>st</sup> place in kick start round E 2020 on 23.8.2020
5	Rachana T Gunashree C Shreelakshmi	App development
6	Mr. Rajiv Ms. Shambavi	Completed Paid Internship at M/s Credator Advanced Systems Pvt Ltd.
7	Mr. Sri Hari K R	Completed Paid Internship at M/s Agentech

#### **Student Projects**

• No. of Projects sanctioned from KSCST-44<sup>th</sup> Series of Student Projects Programme: 2020 - 21: 02

SI. No.	Student Name	USN	Guide	Project Title	
1	Shreelakshmi	1JS17CS094			
	Varuna Kumari RV	1JS17CS115	Dr Prabhudev Jagadeesh	Image assistance for blind	
	Gunashree C	1JS17CS129	buguueeen		
	Achala S Pandit	1JS17CS004		Shaalaloka- an E	
2	Anagha K	1JS17CS010	Mrs Snehalatha N		
2	Chetana M	1JS17CS029		Learning Platform	
	G Narayana Raj	1JS17CS033			

• No. of students received paid Internships: 22

#### **Other Achievements**

- Shraddha V Prasad was a part of winter of Code 2020 as a mentor for the organization Tesseract Coding.
- Shraddha V Prasad received a certificate of excellence for her remarkable contribution to the event contributor's Hack 2020 organized by Hakincodes.
- Rashmi Keshari participated in Next Gen Advocates for Gender Equity Forum organised by Durga India.
- Rashmi Keshari completed Unschool Community program of 4 weeks as a community influencer.
- Nishita Singh successfully completed an internship on Data Analytics Consulting at KPMG.
- Nishita Singh successfully completed blogging and content writing workshop organized by MyCaptain by The Climber (NSRCEL, IIMB incubated).
- Settara Pramod participated in Hack the Interview V (Asia Pacific).

- Settara Pramod and Parthasarathy Rao MVN participated and scored 100% in Python online quiz competition organized by Maharaja Institute of Technology Mysore.
- Akhil Harwadekar successfully participated in workshops on Google cloud platform and Expertise in Docker organized by IIEC-RISE.
- Akhil Harwadekar completed AWS: Going Cloud Native course authorized by Amazon Web Services and Introduction to Cyber Security course offered by Cisco.
- A team of students from 06 semester have developed a mobile app using Fluttter. Manleo MRef is an easy datum reference application that every milling machinist would love to use. This is for all those who are working in shop floors dealing with CNC, VMC, HMC, Milling machines. The app will cut down taking reference calculations by 80% and accurate to micron levels. This is an alpha release of the app, which has basic functionalities implemented. The department has signed an MoU with this company and students will be provided with innovative projects. Team, Shree lakshmi, Sowmya A R, Gunashree C, Varuna Kumari R V, Rachana T
- Students are involved in social activity and are also developing applications associating with NGO's.

SI. No.	Faculty	Funding agency	Туре	Submission date	Amount (Rs.)
1	Dr. Naidila Sadashiv	VGST	-	30-5-2020	5,00,000
2	Dr. Naveen N C	KSCST	Student project program	16-3-2020	4,500
3	Mrs Snehalatha	KSCST	Student project program	1-4-2021	4,000
4	Dr. Prabhudev Jagadeesh	KSCST	Student project program	1-4-2021	4,500

# Sanctioned Projects

#### **Electronics & Communication Engineering**

#### About the Department

The Department of Electronics & Communication Engineering was started in the year 1997 with an intake of 60. Presently the intake of the Department is 180. Department was accredited three times and recent being in the year 2019-20 for 03 years. The Post Graduate M. Tech Course in VLSI Design & Embedded System was started in the year 2006 with an intake of 18 students. The Department is currently headed by Dr. Siddesh G K. The Department has well equipped laboratories, Departmental Library, IEEE-JSSATE Student Branch, ISTEand IETE Student Forum. Department is strengthened by well gualified faculty members whose main aim is to make students aware of the cutting-edge technology with competence, commitment & team work. Electronics & Communication Engineering Department offers an excellent infrastructure for both Under Graduate and Post Graduate Degree with a separate ECE Academic block. A continuous interaction with industries is established through sponsored projects & industrial visits.Invited lectures are organized regularly in the field of emerging technologies from industry and Academic experts. Also, IEEE technical fest is organized every year to provide platform for the students to exhibit their talents. Industrial visits are organized as a part of the curriculum. The projects are carried out by the students in industries and in the Department, covering all aspects of Electronics and Communication Engineering field. Soft skills programs are conducted through Placement cell to improve the overall personality development of the students.

The department faculties have published around 175 journals & 150 conference papers. There are 14 faculty members with doctorate and 16 faculty who are pursuing the Ph.D. Two non-teaching staffs' members are pursuing B.E under VTU & other universities.

Research and Development Centre of Electronics & Communication Engineering department was approved on July 2014. The R&D Centre carries out fundamental research in selected areas of Power & control engineering, Signal & image processing, VLSI, Communication etc., The R&D Centre has the many facilitieslike computers, internet facility, cadence software & the measuring instruments.

Department has good Alumni network and meet is conducted annually. Parents Teachers Meeting is conducted every semester. The department has excellent placement and round 80% of students are placed in reputed companies with average package of 5 lakhs.Department has established industry assisted laboratories and the faculty have got funding of Rs. 80 lakhs from various funding agencies like VGST, TEQIP, KCTU a few to name.

#### Vision

Enable the students to achieve academic excellence at par with premier institutes and to meet the requirements of industry and research in the field of Electronics and Communication Engineering.

#### Mission

- 1. Enable the students to achieve academic excellence at par with premier institutes and to meet the requirements of industry and research in the field of Electronics and Communication Engineering.
- 2. Impart knowledge in the emerging areas through industry-institute interaction, seminars, workshops, and conferences.
- 3. Provide a strong foundation in core subjects to enable the students for continuous learning and research.

#### **Program Educational Objectives**

- PEO 1: Graduates will be able to apply fundamental engineering, scientific and mathematical concepts to solve practical problems.
- PEO 2: Graduates apply the knowledge gained to solve complex problems in emerging technologies of Electronics Engineering and allied areas.
- PEO3: Graduates develop innovative ideas leading to research and product development.
- PEO 4: Graduates exhibit high professional ethics with human values and social responsibilities.

#### **Program Specific Objectives**

- PSO1: Solve the Engineering problems of Electronics & Communication Engineering in VLSI design, Embedded Systems, Communication Engineering, Power Electronics and Control Systems.
- PSO2 Demonstrate the programming skills using assembly &high-level languages to solve Engineering problems.
- PSO3 Design, realize & validate the electronic systems.

#### **Admission statistics**

Year	Sanctioned Intake	Actual Admitted	CET (Opening & Closing Rank)
2020-21	180	113	12284-135706
2019-20	180	154	11818-16185
2018-19	180	167	7446-39858

## **Placement statistics**

Year	No. of students placed
2020-21	61
2019-20	64
2018-19	96

# **Accreditation Status**

• The Department is accredited by NBA, New Delhi, for the period of three years from 2020-2023, till 30.06.2023

# Faculty Cadre

No. of Faculty members	Professor	Associate Professor	Assistant Professor
35	4	7	24

# **Faculty Members**

SI. No.	Name	Designation	UG	PG	Ph.D.
1	Dr. Mrityunjaya V Latte	Principal & Professor	B.E (Electrical)	M.E (Digital Electronics)	Digital Image Processing
2	Dr. B G Shivaleelavathi	Professor	B.E (E & E)	M.E (Control Systems)	Vector Control of Three Phase Induction Motor.
3	Dr. Aravind H S	Professor	B.E (E &C)	M. Tech (Bio- medical Instrumentation)	Fault Tolerant Measurement Techniques of Acoustic Spectrum. From VTU, Belagavi
4	Dr. Shivakumarswamy P M	Professor	B.E (E &C)	M.E (Digital Electronics)	Denoising Synthetic Aperture Radar Images Using Improved Thresholding Techniques in The Curvelet Domain From
5	Dr. Siddesh G K	Associate Professor	B.E (E & C)	M.Tech (Digital Electronics and Advanced Communication.)	Neuro-Fuzzy Model based Routing Protocol in Mobile Ad-Hoc Networks

6	Dr. Veerabhadrappa S T	Associate Professor	B.E (E &C)	M.Tech (Biomedical Engineering)	Assessment of Autonomic Response and Haemodynamic Parameters Using Heart Rate Variability and Pulse Signals
7	Dr. VeerammaYatnalli	Associate Professor	B.E (E &C)	M.E (Digital Electronics)	Image Compression and Restoration using Inpainting algorithms for Wireless Communication Applications.
					Dayananda Sagar College of Engineering, Bengaluru
8	Dr. Usha S M	Associate Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	Design and Optimization of Digital Modulators for Wireless Communication
9	Dr. Saroja S Bhusare	Associate Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	Design and Development of Fixed- Width Radix-8 Booth Multipliers for High Accuracy and Low Power Operation
10	Dr. Poornima N	Associate Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	Energy Efficient Parallel Prefix Adders employing High-Valency Jackson Recursion and Tree Sparseness
11	Dr. Mallikarjuna Swamy S	Associate Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	VLSI Design and Communication Systems
12	Mrs. Latha B N	Assistant Professor	B.E (E &C)	M.Tech (Industrial Electronics)	-
13	Mrs. Kavitha M	Assistant Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	-
14	Dr. G Parameshappa	Assistant Professor	B.E (E &E)	M.E (Power Electronics)	Analysis and design of digital filter banks for hearing aid applications
15	Mrs. Shubha B	Assistant Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	-

16	Mrs. Kavitha H S	Assistant Professor	B.E (E &C)	M.Tech (Industrial Electronics)	-
17	Mrs. Sheela S N	Assistant Professor	B.E (E &C)	M.S (Biomedical)	-
18	Mrs. Savitha A C	Assistant Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	-
19	Dr. Thejaswini P	Assistant Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	An Adaptive Algorithm based Authentication System on Microchip,
20	Mrs. Suguna G C	Assistant Professor	B.E (E &C)	M.Tech (Digital Electronics and Communication)	-
21	Mr. Ravikumar K P	Assistant Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	-
22	Mrs. Sowmya R Bangari	Assistant Professor	B.E (E &C)	M.Tech (Applied Electronics)	-
23	Mrs. Anuradha M G	Assistant Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	-
24	Mrs. Sunita L Shirahatti	Assistant Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	-
25	Dr. Sathish Shet K	Assistant Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	Topic: ASIC Based Verification Methods for Digital Image Steganography.
26	Mrs. Sangeetha K N	Assistant Professor	B.E (E &C)	M.Tech (Digital Communication)	-
27	Mrs. Gouri S Katageri	Assistant Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems)	-
28	Mrs. Neela A G	Assistant Professor	B.E (E &C)	M.Tech (VLSI Design & Embedded System)	-
29	Mrs. Anu H	Assistant	B.E	M.Tech	-

		Professor	(E &C)	(VLSI & Signal Processing)	
30	Mrs. Shilpa	Assistant Professor	B.E (E &C)	M.Tech (VLSI Design and Embedded Systems	-
31	Mr. Mahendra H N	Assistant Professor	B.E (E &C)	M.Tech (Digital Electronics & Communication)	-
32	Ms. Gunasagari G S	Assistant Professor	B.E (E &C)	M.Tech (Digital Electronics & Communication)	-
33	Mrs. Spandana Shashikumar	Assistant Professor	B.E (E &C)	M.Tech (Network and Internet Engineering)	-
34	Mrs. Ashwini Dasare	Assistant Professor	B.E (E &C)	M.Tech (Digital Electronics & Communication)	-
35	Mr. Manohar B S	Assistant Professor	B.E (E &E)	M.Tech (Power System Engineering)	-

# Supporting Staff

SI. No.	Name	Qualification	Designation
1	Kumaraswamy H C	Diploma	Foreman
2	Mamatha S	Diploma	Programmer
3	Asharani S	Diploma	Instructor
4	Srikantaswamy S C	B.E	Instructor
5	Mallesha C	Diploma	Instructor
6	Mahadevappa	Diploma	Instructor
7	Ranjani S N	B.E	Instructor
8	Sujatha	M.Tech	Instructor
9	Guruprasad T B	B.E	Instructor
10	Shivaprakash H M	B.Sc.	Instructor

11	Madhu S	Diploma	Instructor
12	Sunil Kumar R R	Diploma	Instructor
13	Irshad Ahamed	ITI	Lab Helper
14	Gowrishankar S J	Diploma	Lab Helper
15	Nagaraju M B	ITI	Lab Helper
16	Basavanna M	ITI	Lab Helper
17	Sujatha B A	ITI	Lab Helper

#### **Departmental achievements**

 Dr. ThejaswiniP., Asst Professor, Dept of ECE worked as Post-Doc in the R&D Project entitled "Information security and awareness project Phase-"2 under the supervision of Dr.Sukumar Nandi, Department of CSE, IIT, Guwahati from 11 August 2020 to 10 February 2021

#### **Events Organized**

Two weeks Faculty Development Programme on "Opportunities & Challenges in Entrepreneurship",



sponsored by NSTEDB, Dept. of Science & Technology, Govt. of India, organized by JSSATEB-STEP, from 15-27 March 2021. The objective of the programme is to enable the faculty to guide, motivate and counsel the engineering students towards entrepreneurship. Exposing the faculty to the area of entrepreneurship development process and equip them to develop road map for EDP activities in their campus. Enhancing and developing the requisite skills in faculty to introduce

entrepreneurship-oriented course in their academic campus and take up research and consultancy in the area of entrepreneurship.

• One - Week Online Faculty Development Program on "Image and Signal Processing" from 4-8 January 2021.

#### Webinars

SI. No.	Title	Resource Person
1	Workshop on "Basics of Linux Operating System and Data Analytics by Vodaphone India foundation	Mr.Sagar Shinde, and Mr.Saroj FICE and Connecting Dream
	University program - connecting dream foundation	Foundation, Bangalore

	/FICE" Date: 10-18 August 2020 &19-26 August 2020	
2	Expert talk on "How to crack Top Rated Placements, Higher Education, Scholarships" , 20 <sup>th</sup> October 2020	P N Santhosh, CEO, Career Labs, Abhishek Gupta Byju's – National Eminent speaker
3	Expert talk on "Job Opportunities on IOT's, Embedded Systems & VLSI", 23 <sup>rd</sup> October 2020	Jebastin, AVP Engineering Photon InfoTech Sikander, Head – Technology Cranes Varsity
4	Workshop on "Image Recognition with TensorFlow", 31October 2020	Vodafone Engagement Activity –FDP
5	FDP on "Recommender Systems"19 December 2020	Dr. Dilip Singh Sisodia, Faculty, Dept. of CSE, NIT, Raipur
6	Workshop on "Online Skill Development Program on Artificial Intelligence Using Python Programming" 2- 4 December 2020	Mr. Mohan, Senior Software Engg., Digital Shark Technology, Bengaluru
7	Webinar on "Entrepreneurial Leadership" 30 <sup>th</sup> December 2020	Dr. Padmakshi Lokesh, CEO & Co- founder, Smiles in Milez
8	Workshop on " How to build drone" 21- 23 January 2021	Mr. Ravikumar, Software Engineer, Digital Shark Technology

## **Publications**

- SadiyaThazeen, Mallikarjunaswamy S, Siddesh.G.K. ,Sharmila.N, "Conventional and Subspace Algorithms for Mobile Source Detection and Radiation Formation", Traitement du Signal, International Information and Engineering Technology Association (IIETA), doi.org/10.18280/ts.380114
- S Mallikarjunaswamy, N Sharmila, H N Mahendra "A comprehensive review of parallel concatenation of LDPC code techniques", Indian Journal of Science and Technology, Indian Society for Education and Environment (iSee), 10.17485/IJST/v14i5.2171
- Thejaswini P., Anu H., D. Mahesh Kumar, Aravinda H.S., "An adaptive algorithm-based authentication system for real-time biometric time-attendance system", Information Technology In Industry, La Trobe Univ, Dept Computer Science &Computer Engineering, DOI: 10.17762/itii. v9i1.104, Feb 2021.
- Vijayalakshmi V, D Mahesh Kumar, S C Prasanna Kumar and Thejaswini P, "NDVI COMPUTATION OF LISS III IMAGES USING QGIS", Information Technology in Industry, La Trobe Univ, Dept Computer Science & Computer Engineering, DOI: 10.17762/itii. v9i1.291, March 2021
- Kavitha M, Akhila S, "Analysis and Design of OTA topologies for Bio-Potential signals, IJFGCN, SERSC, 18 Feb 2021.

- VeerammaYatnalli, B G Shivaleelavathi, Saroja S Bhusare, "Wheelchair Control Using Brain Computer Interface", International Journal of Future Generation Communication and Networking, Science & Engineering Research Support society, 10th March, 2021, Vol. 14 No. 1 (2021), ISSN: 2233-7857
- A Madhu, M Komala, V Rekha, S Mallikarjunaswamy, "Design of fuzzy logic-controlled hybrid model for the control of voltage and frequency in microgrid", Indian Journal of Science and Technology, 10.17485/IJST/v13i35.1510
- B.G Shivaleelavathi, Ambily Babu, VeerammaYatnalli, "Enhanced Power Added Efficiency for RF Power Amplifiers in Mobile Communication", International Journal of Grid and Distributed Computing, Science & Engineering Research Support society, V, 24/08/2020, 2005-4262 IJGDC
- B. G. Shivaleelavathi, Chinmayi, VeerammaYatnalli, Review on Multi Level Inverter Topologies and Control Strategies for Solar Power Conversion, EMITTER International Journal of Engineering Technology, PoliteknikElektronika Negeri Surabaya, Indonesia, 12/1/2020, 10.24003/emitter. v7i2.500 http://emitter.pens.ac.id
- Anu H, Dr. V Udayashankara, "A Review on Feature Extraction in Arrhythmias of ECG Signals", PENSEE International Journal, Espaces Marx, ISSN: 0031-4773
- Savitha AC, Dr. MN Jayaram, "Survey and Study of Energy Efficient Routing Protocols for Mobile Adhoc Networks and Wireless Sensor Network", PENSEE International Journal, Espaces Marx, ISSN: 0031-4773.
- Rejeesh M R &Thejaswini P, "MOTF: Multi-objective Optimal Trilateral Filtering based partial moving frame algorithm for image denoising", Multimedia Tools and Applications, Springer, 3rd August 2020 doi.org/10.1007/s11042-020-09234-5
- R J Kavitha, Aravinda H S, "A NOVEL CHARACTERISTIC MECHANISM FOR DIFFERENT MICROSTRIP PATCH ANTENNA (MPA)", International Journal of Advanced Research in Engineering and Technology (IJARET), iaeme, Volume 11, Issue 11, November 2020, pp. 691-699, DOI: 10.34218/IJARET.11.11.2020.066
- Anuradha M G, Basavaraj.L, "High speed and low power implementation of K-Means Clustering Algorithm for image analysis", High Technology letters, Science Press, doi.org/10.37896/HTL26.11/2050

- Anu H, Dr. V Udayashankara, "A Review on Feature Extraction in Arrhythmias of ECG Signals", PENSEE International Journal, Espaces Marx, ISSN: 0031-4773, Espaces Marx
- Savitha A C, Dr. MN Jayaram, "Survey and Study of Energy Efficient Routing Protocols for Mobile Adhoc Networks and Wireless Sensor Network", PENSEE International Journal, Espaces Marx, ISSN: 0031-4773, Espaces Marx.
- Dr. Veerabhadrappa S T, Dr. P M. Shivakumaraswamy, Venkatesha M. Iyengar, Anuroop P. Das, Abhyudaya Sharma, "Prototype Development of Continuous Remote Monitoring of ICU Patients at Home", Instrumentation Mesure Métrologie, International Information and Engineering Technology Association, Canada, https://doi.org/10.18280/i2m.200203.

# Academic Achievements

#### **Students Achievements**

List of Student Project Proposals approved for sponsorship from Karnataka State Council for Science and Technology, -44<sup>th</sup>Series of Student Project Programme: 2020-21

SI. No.	Project Title	Faculty Name	Students Name	Amount (Rs.)
1	Non-Invasive Glucose and Cholesterol Monitoring Device	Mrs. Shubha B, Asst. Prof. Mrs. Anuradha M G, Asst. Prof.	Suprada H S Prathiksha R V Shrilaxmi Dixit Sumedha C	6000.00
2	Keller: Indian Sign Language Gesture to Text and Speech Assistant	Ms. Gunasagari G S, Asst. prof. Dr. Poornima N, Assoc. Prof.	AbhijnaYaji Achuth M Anisha Maria Dsilva Chethana S R	7000.00
3	Smart Meter for Water Utilization Using lot	Dr. Mallikarjunaswamy S, Assoc.Prof. Dr. Siddesh G K, Assoc. Prof and HoD, Dept. of ECE	Sriramulu Hemanth Kumar Abhishek. M Deepak. S Yasin Qureshi. M	8000.00
4	Cloud Based Centrelaized Smart Cart and Contactless Billing System	Mr. Mahendra H N,Asst. Prof. Mrs. Neela A G,Asst. Prof.	Chandan B Nooli Hrishikesh Mashalkar HavishManikya V Kruthik N	5500.00

# **Sanctioned Projects**

Grants Received: Amount of Rs. 30,00,000/- for the year 2020-21.
 Faculty members: Dr. Mallikarjunaswamy S, Assoc. Prof. and Dr. Siddesh G.K , Assoc. Prof. & HOD





Industrial visit to Ace Designers, Nelamangala, on 19 March, 2021

# **Department of ISE**

#### **About the Department**

The Department of Information Science and Engineering started in the year 1999. The Department has current intake of 120. The Department comprises of excellent infrastructure with well-equipped Laboratories, Class rooms and Departmental Library. The Student forum SAMYOG is solely for the benefit of student community. The students actively take part in the co-curricular activities like project, paper & poster presentations, coding, debugging etc. In the extra-curricular events like NSS, sports, college fest, and in the preparation of technical magazines & newsletters. They are also volunteering to their own events like YODHA, Book borrow.com, bookbeka.com, medical camps like blood donation camps, eye testing camps, dental camps and Ayurvedic camps etc. The students of the department have recorded very good performance in competitive examinations such as GATE, GRE, GMAT, TOEFEL, CAT, PGCET etc. and admitted in the top Universities of the world. Department is strengthened by well qualified faculty members whose main aim is to make students aware of the cutting-edge technology with competence, commitment & team work. An industry interaction is established through MOUs. Sponsored projects & industrial visits, invited lecturers, workshops, seminars and webinars are also organized on a regular basis in emerging technologies from experts of industries and institutions. Further, most of the faculty members and students won the best paper awards, the best poster awards, the best project awards in National / International Conferences across the globe. Our faculty members and students are also members of professional societies like ISTE, CSI & IEEE etc. Soft-skill programs are conducted through the placement cell for the overall personality development of the student. Most of our students are well placed in fortune 500 companies. Many of our students have published and presented their research papers in reputed National/ International Journals and Conferences. Many of our Alumni joined MS programs in the leading and reputed Universities across the globe. Under the R & D activity, RPS project has been taken up by the department and successfully completed. Furthermore, project proposals are in pipeline.

#### Vision

To emerge as a Centre of academic excellence, by producing competent professionals to meet the global challenges in the field of Information Science and Technology

#### Mission

- 1. Prepare the competent professionals to meet the advancements in the industry and academia by imparting quality technical education.
- Enrich the technical ability of students to face the world with confidence, commitment and teamwork.
- 3. Inculcate and practice strong techno-ethical values.

#### **Program Educational Objectives**

PEO 1: To demonstrate analytical and technical problem-solving abilities.

- PEO 2: To conversant in the developments of Information Science and Engineering, leading towards the employability and higher studies.
- PEO 3: To engage in research and development leading to new innovations and products.

#### **Program Specific Objectives**

- PSO 1: Apply the appropriate programming constructs for solving engineering problems.
- PSO 2 Adapt to software development methodologies.
- PSO 3 Demonstrate the knowledge towards the domain specific initiatives of Information Science and Engineering.

#### Admission statistics

Year	Sanctioned Intake	Actual Admitted	CET (Opening & Closing Rank)
2020-21	120	114	9632 - 129429
2019-20	120	110	9317 - 40322
2018-19	120	112	7903 - 13753

## Placement statistics

Year	No. of students placed
2020-21	41
2019-20	77
2018-19	64

#### **Accreditation Status**

• The Department is accredited by NBA, New Delhi, for the period of three years from 2020 - 2023, till 30.06.2023

# **Faculty Cadre**

No. of Faculty members	Professor	Associate Professor	Assistant Professor
16	02	03	11

# Faculty Members

SI. No.	Name	Designation	UG	PG	Ph.D.
1	Dr. D.V Ashoka	Professor	BE (CSE)	M.Tech (CSE)	A Study on Elicitation Techniques Selection Using Knowledge Management
2	Dr. Dayananda P	Professor & HOD	B.E (ISE)	M.Tech (CSE)	An Effective and Versatile Keyword Search on Semi- Structured Data
3	Dr. Chayadevi M. L	Associate Professor	B.E (CSE)	M.Tech (CSE)	Knowledge Discovery from Medical Image Databases: Detection and Classification of TB and MP Smear Images with their Performance Evaluation
4	Dr. Malini M Patil	Associate Professor	B.E.(CSE)	M.E.(CSE)	A critical study of rule mining in Data streams
5	Dr. Rekha P M	Associate Professor	B.E. (E & C)	M.Tech (CSE)	Effective Mechanisms to Achieve High Quality Performance in Cloud Data Centers
6	Mrs. H R Sumathi	Assistant Professor	B.E. (E & C)	M.Tech (CSE)	-
7	Mrs. G Mamatha	Assistant Professor	B.E (CSE)	M.Tech (CNE)	-
8	Dr. Nagamani N P	Assistant Professor	B.E (CSE)	M.Tech (CNE)	Efficient Methodologies for Scalable Cloud Computing Systems
9	Dr. Nethravathi B	Assistant Professor	B.E (CSE)	M.Tech (CNE)	On Design of Topological Structures of Interconnection Survivable Computer Communication Networks
10	Mrs. Anitha P	Assistant Professor	B.E (CSE)	M.Tech (CNE)	-
11	Mrs. Sudha P R	Assistant Professor	B. E (CSE)	M.Tech (CSE)	-
12	Dr. Sowmya K N	Assistant Professor	B.E.(ISE)	M.Tech (CNE)	Statistical Tools for Video Forensics
13	Mr. Anil B C	Assistant Professor	B.E(CSE)	M.Tech(CSE)	-
14	Mrs. Nagashree S	Assistant Professor	B.E.(ISE)	M.Tech (NIE)	-
15	Mrs. Sahana V	Assistant Professor	B.E(CSE)	M.Tech (CSE)	-

16	Mrs. Punitha M	Assistant Professor	B E (ISE)	M.Tech (CSE)	-
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## **Technical Staff**

SI. No.	Name	Qualification	Designation
1	Gajendra J	Diploma - IST	Instructor
2	Sowmya G	B.E - CSE	Instructor
3	Mahendra M	B.E - CSE	Instructor
4	Manjunatha H S	B.E - CSE	Instructor
5	Sowmya P	B.E - CSE	Instructor

# Supporting Staff

SI. No.	Name	Qualification	Designation
1	Ramya M	ITI - COPA	Lab helper
2	Sreedhara S D	ITI - Fitter	Lab helper
3	Manukumar KS	ITI - Fitter	Lab helper
4	Mahadevaswamy N	Diploma - EC	Lab helper
5	Mahadevaswamy H V	SSLC	Attender

#### **Departmental achievements**

## MoU signed

- MoU signed between Department of ISE and M/s HEB Exports Pvt. Ltd. on 25.1.2021
- MoU signed between Department of ISE and M/s TNS India Foundation on 16.2.2021

# **Events Organized**

SI. No.	Date	Webinar / Technical Talk	Resource Person
1	26-2-2021	Technical Talk on Cloud Computing for Real-Time Systems	Mr. Suhas Nayak Cloud App Specialist Accenture, Bengaluru
2	28-11-2020	Webinar on NoSQL Databases	Mr. Manjit Singh Sodhi, IT Architect, IBM, Bengaluru.
3	21-11-2020	Webinar on Introduction to design patterns	Mr. Satish Honnavali Managing Consultant IBM Bengaluru

4	21-11-2020	Webinar on Robotics Process Automation – an Overview	Mr. Ravishankar Rao Emaneni Sr. Director Intelligent Automation and Data Solutions, NTT Data
5	19-10-2020	Webinar on cloud-based application using case studies	Ms. Ishwarya Narahari, University of Texas at Arlington

#### **Co-Curricular Activities**

SI. No	Date	Industry	Title of the Program	No. of Participants
1	24-3-2021	M/S. TNS India Foundation	C2TC Program	120
2	23-3-2021	M/S. TNS India Foundation	C2TC Program	90

## **Faculty achievements**

- Dr. Sowmya K N, Assistant Professor, Department of ISE was awarded Ph.D. from Visvesvaraya Technological University, Belagavi, thesis titled "Statistical Tools for Video Forensics", under the guidance of Dr. H.R Chennamma, SJCE, Mysuru on 3/4/2021.
- Dr. Bharath M.B was awarded PhD from Visvesvaraya Technological University, Belagavi, thesis entitled " A Study on Operating System Resource virtualization and Performance measurements" under the guidance of Dr. D.V Ashoka, Professor, Department of ISE, JSSATE, Bengaluru, on 3/04/2021.

## **Journal Publications**

- Dayananda P, Anil B C, Sowmyarani C N, "Efficient Local Cloud Based Solution for Diabetic Retinopathy Detection", International Journal of Web-Based Learning and Teaching Technologies, IGI global, Volume 16, Issue 3, Article 3, 2021.
- Anil BC, Dayananda P Nethravathi B, "Efficient Local Cloud-Based Solution for Liver Cancer Detection using Deep Learning", IGI Global. International Journal of Cloud Applications and Computing (IJCAC).(in press), Volume 12, Issue 1, Article 9, 2021
- Anil BC, Dayananda P, "Automatic Liver Tumor Segmentation based on Multi-level Deep Convolutional Networks and Fractal Residual Network", IETE JOURNAL OF RESEARCH, Taylor &Francis.(in press), 2021, DOI: 10.1080/03772063.2021.1878066
- Punitha M, Shivangowda Patil, Dayananda P,A Review of Different Techniques for Detecting Alzheimer Disease using ANN, SVM and Deep Learning, Volume 12, issue1, Page 58-66, IJEET, 2021, DOI: 10.34218/IJEET.12.1.2021.007.
- Basetty Mallikarjuna, Munish Sabharwal, Dayananda P, Niranjanamurthy M, "The Consequences of E-Learning with Covid-19 Pandemic to achieve OBE", Palarch's Journal of Archaeology of Egypt/Egyptology 17(9).2021.

- Basetty Mallikarjuna, Dayananda P, Niranjanamurthy M, Pardeep Kumar, Munish Sabharwal, Outcome-based Education for Computer Science in E-learning through Moodle-Palarch's Journal of Archaeology of Egypt/Egyptology 17(9), 2021.
- Suraj Kotecha, Adithya Vasudevan, V.M.K. Kashyap Holla, Satyam Kumar, Dayananda Pruthviraja, Mrityunjaya Vithal Latte, 3D visualization cloud-based model to detect and classify the polyps according to their sizes for CT colonography, Journal of King Saud University - Computer and Information Sciences,2020.
- Vani, H. Y., Anusuya, M. A., & Chayadevi, M. L., Morlet-Kernel Principal Component Analysis Features for Speech Recognition. Journal of Computational and Theoretical Nanoscience, 17(9-10), 4482-4486, 2020.
- Chayadevi, M. L.; Madhyastha, Sujith; Nisarga, K. N.; Charitha, H.; Susharan, B. Journal of Computational and Theoretical Nanoscience, Volume 17, Numbers 9-10, September/October 2020, pp. 4473-4481(9), American Scientific Publishers, DOI: 10.1166/jctn.2020.9100.
- Shwetha Kaddi, Malini M Patil "Challenges and Trends in Clinical Data Analytics", Journal of Science and Technology Volume 5, P348-360, ISSN: 2456-5660 Issue 4, July-August 2020, DOI:10.46243/jst.2020.v5.i4.pp348-360.
- Swarna KadagadKai, Sahana V, Malini M Patil "Consumer Purchase Patterns using File Structures"
- Basavaraj Hiremath and Malini M Patil "Enhancing optimized personalized therapy in clinical decision support system using Natural Language Processing" Journal of King Saud University-Computer and Information Sciences ISSN: 2074-9023. DOI 10.1016/j.jksuci.2020.03.006.
- Anitha, P., Patil, M. M., & Venkatapur, R. B., COVID-19 effect on supply and demand of essential commodities using unsupervised learning method, 2020.

#### **Conference Publications**

- Prachi Jain, Syeda Zoya Kulsum, Rohan, Srivastava, Aryan Singh, Rekha P M, Analysis of Deep Learning Algorithms for Breast Cancer Diagnosis on WBC, International Journal of Engineering Research & Technology (IJERT),ISSN: 2278-0181,NCAIT - 2020 Conference Proceedings. No.8,Issue No.15,pp: 1-7 ,2020.
- Rekha P M Likitha, G Nishant Kumar, Alisha Sharma, Study of Different Approaches to Develop an Automatic Traffic Rule Violation Detection System, International Journal of Engineering Research & Technology (IJERT),ISSN: 2278-0181,NCAIT - 2020 Conference Proceedings, Vol.8, Issue No.15,pp: 8-11,2020.
- Suhasi P M, Khadija Fatima, Nagamani N Purohit, Rekha P M. IoT in the Face of COVID 19, International Journal of Engineering Research & Technology (IJERT),ISSN: 2278-0181,NCAIT -2020 Conference Proceedings, Vol. No.8,Issue No.15,pp: 125-129,2020.

- Spoorthi Kulkarni, Rekha P M,Omurt [On-Road Management Using Rfid And IoT] Systems for City Traffic Control. Systemized Sophistications for Generating Smarter Cities, Proceedings of "Magic of Bits & Bytes – Drives the World", Regional Student Convention Computer Society of India, Region V,PP.68-74,2020.
- Avya Kiran, Raksha R, Anisoor Rahman, Varsha K N, Nagamani N P, Driver Drowsiness Detection, International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, NCAIT -2020 Conference Proceedings, Vol.8, Issue No.15, pp: 33-35,2020.
- Shubhanki, Shubhashree, Praharsh, Akash Kumar, Nagamani N P, Fine-Grained Text to Image Generation with Stacked Generative Adversarial Networks, International Journal of Engineering Research & Technology (IJERT),ISSN: 2278-0181, NCAIT - 2020 Conference Proceedings, Vol.8, Issue No.15,pp: 27-32,2020.
- Suhasi P M,Khadija Fatima, Nagamani N Purohit, Rekha P M. IoT in the Face of COVID 19, International Journal of Engineering Research & Technology (IJERT),ISSN: 2278-0181,NCAIT -2020 Conference Proceedings, Vol.8, Issue No.15,pp: 125-129,2020.
- Abhishek Verma, Vibhooti Singh, Yash Pathak, Shubham, Nagamani N P, Perception Assessment of Indian Colleges through Twitter Data, Journal of Computer Based Parallel Programming, NCAIT 2020 e\_ISSN:2582-2179, Vol 5, Issue 1, pp:19-23.
- Ankit Ojha, Ayush Pandey, Anisoor Rahman, Bhavika Sharma, Dr. Nethravathi B, Dr. Dayananda P Anti-Collision for Mobile RFID - A Review International Journal of Engineering Research & Technology (IJERT) 2020/oct/18/15/186-190.
- Aditya Patil, Darshan B.G., Dr. D.V. Ashoka, Nethravathi B IoT Based Medicine Dispenser, International Journal of Engineering Research & Technology (IJERT) 2020/oct/18/15/152-155.
- Nethravathi B, Amitha G, Anusha Saruka, Bharath T P, Setu Suyagya "Study on Structuring Natural Language to Query Language" Engineering, Technology & Applied Science Research, Vol. No. 10 Issue No. 6, Pages: 6521-652, December 2020, https://doi.org/10.48084/etasr.3873

#### Patent

- Dr Dayanand P et al., has published an Indian patent with the title of the invention being: "Algorithm reconstructs a 50 percent occluded faces by automated geometrical measurements" on 11/09/2020.
- 2. Dr. D.V. Ashoka et al., has published an Indian patent with the title of the invention being: "Rotating bird feeder" on 12/03/2021.

#### **Students Achievements**



Vidya M (1JS16IS089) secured 2<sup>nd</sup> Rank with CGPA 9.038

- Prajwal V Presented paper "Data analysis on E-Commerce Reviews using ML Models and NLP" at KS Institute of Technology, Bengaluru, Won Best paper Award
- Spoorthi Kulkarni Participated in "Techno Freaks 2020", walk your Skill, AITM Belagavi.

## **Project Initiatives**

Karnataka State Council for Science and Technology, Govt. of Karnataka has sanctioned an amount of Rs.5500/- towards project "AI enabled video compression for low bandwidth streaming in rural areas" on 01/04/2021. The project team comprises of Mr. Siddharth S, Mr. Rishab J Shivalli, Ms. Shrinkhla Sinha and Ms. Vijayalakshmi S with Dr. Dayananda P as the project guide.

## **Student Internship**

Student	Company	Title of the Internship	Amount (Rs.)	Duration
Prateek D	Zysk Technologies	Software developer	12500/-	2/9/2020 (ongoing)
Vaishnavi P	Zysk Technologies	Software developer	12500/-	2/9/2020 (ongoing)
Rajath M R	Zysk Technologies	Software developer	12500/-	2/9/2020 (ongoing)
Jeevan Kishore	Textron	Software developer	15000/-	9/11/2020-30/6/2021

## **Department of Mechanical Engineering**

#### About the Department

The department was established in the year 2004 and is offering B.E. program in Mechanical Engineering with an intake of 180 students, M. Tech in Thermal Engineering with an intake of 18 students. The Department is recognized as a Research Center by Visvesvaraya Technological University, Belagavi. The B. E program is accredited for 3 years by National Board of Accreditation (NBA), under Tier-II (According to Washington Accord) w.e.f. 01.08.2020 to 30.06.2023. The Department has established a Centre of Excellence with M/s. Toyota Kirloskar Motors Pvt. Ltd., and M/s. ACE Micromatics Ltd. to provide hands-on training to the students in modern technology. The department is currently lead by Dr. Bhimasen Soragaon

#### Vision

Be amongst the top Mechanical Engineering Department in the region by sculpting competent engineers through education and research.

#### Mission

- 1. Build strong foundation in Mechanical Engineering domain complemented with interdisciplinary skills.
- 2. Develop state-of-the-art facilities with emphasis on industry interaction, consultancy, research and innovation.
- 3. Enable to seek professional employment, pursue higher studies and promote entrepreneurship.

#### **Program Educational Objectives**

- PEO 1: Graduates shall have sound knowledge in Mechanical Engineering domain.
- PEO 2: Graduates shall have necessary skills for addressing industry and societal needs.
- PEO 3: Graduates shall show professionalism in engineering practices for life long learning with positive attitude.

#### **Program Specific Objectives**

- PSO 1: Apply the acquired knowledge in design, thermal, manufacturing and interdisciplinary areas for solving industry related problems.
- PSO 2 Solve complex Mechanical Engineering problems using appropriate software tools.

## **Admission statistics**

Year	Sanctioned Intake	Actual Admitted	CET (Opening & Closing Rank)
2020-21	180	15	30788 - 149797
2019-20	180	100	24475-117023
2018-19	180	109	21137-49022

#### **Placement statistics**

Year	No. of students placed	
2020-21	02 (on going)	
2019-20	29	
2018-19	48	

# **Accreditation Status**

• The Department is accredited by NBA, New Delhi, for the period of three years from 2020 - 2023, till 30.06.2023

## **Faculty Cadre**

No. of Faculty members	Professor	Associate Professor	Assistant Professor
29	3	5	21

# **Faculty Members**

SI. No.	Name	Designation	UG	PG	Ph.D.
1	Dr. B P Shivakumar	Professor	B.E (Mech.)	M.Tech Production Engg and System Technology	Finite Element Methods in the Characterization of Mechanical and Thermal behavior of Metal Matrix Composites
2	Dr. Bhimasen Soragaon	Professor & HOD	B.E (Mech.)	M.Tech (Production Management)	On Some Aspects of Identifying Factors Affecting Overall Worker Effectiveness (OWE) for Improving Production Worker Effectiveness Towards Six Sigma Level in

					SMEs of North Karnataka
3	3 Dr. Anandkumar R Annigeri B.E (Mech.)		M.E (Production Management)	Static and Free Vibration Behavior of Magneto-Electro- Elastic Structures	
4	Dr. B V Raghavendra	Associate Professor	B.E (Mech.)	M.E (Production Management)	Genetic Algorithm Based Methodology for Job Sequencing to Ensure Maximum Utilization of Parallel Machines in Flexible Manufacturing System
5	Dr. Mruthunjaya M	Associate Professor	B.E (Mech.)	M.Tech (Maintenance Engineering)	Damage Tolerance Study of Erosion Resistant Carbide Coatings for High Temperature Applications Prevailing in Pulverized Coal Burner Nozzle
6	Dr. T S Nanjundeswaraswamy	Associate Professor	B.E (Mech.)	M.Tech (Master of Engineering Management)	Leadership styles and Quality of Work Life in SMEs – A comparative study
7	Dr. Gowreesh S S	Associate Professor	B.E (Mech)	M.Tech (Thermal Engineering	Flow optimization of Aeroengine Combustion chamber using CFD
8	Dr. Yogesha K B	Associate Professor	B.E (Mech)	M.E (Machine Design)	Development of Austempered Chilled Ductile Iron (ACDI) for Extreme Tribological Applications
9	Dr. Suresh Holi	Assistant Professor	B.E (Mech)	M.E (Production & Industrial Systems Engineering)	Optimisation of Job Shop Scheduling Problem with Setup Times using Genetic Algorithm
10	Dr. Prashantha. B. G.	Assistant Professor	B.E (Mech)	M.E (Energy Systems Engineering)	Design and Analysis of Stack-Based Thermoacoustic Refrigerator
11	Dr. K.S. Anil Kumar	Assistant Professor	B.E (Mech)	M.Tech (Maintenance Engg.)	Experimental Investigations on Friction Stir Welded Joint of Dissimilar Aluminum Alloys.

12	T K Nagaraja	Assistant Professor	B.E (Mech)	M.Tech (Product Design and Manufacturing)	-
13	Kousik S	Assistant Professor	B.E (Mech)	M.Tech (Machine design)	-
14	Dr. B N Venkatesh	Assistant Professor	B.E (Mech)	M.Tech (Manufacturing science and Engg)	Friction stir welding of Metal matrix composites
15	Dr. Devappa	Assistant Professor	B.E (Mech)	M.Tech (Machine design)	Studies on Minor Addition of Ti, B, Cu, Mg and Sr in The Form of Master Alloys on The Microstructure, Mechanical Properties with Fracture Behavior Analysis of Near Eutectic and Eutectic Al-Si Alloys.
16	J S Srikantamurthy	Assistant Professor	B.E (Mech)	M.Tech (Production Engg and System Technology)	
17	Dr. G M Swamy	Assistant Professor	B.E(Mech)	M.Tech (Maintenance Engg.)	Experimental investigation and Analysis of wear of Single point cutting tool and Drill bit using Acoustics Emission and Surface Roughness'
18	Dr. Siddappa P.N.	Assistant Professor	B.E(Mech)	M.Tech (Master of Engineering Management)	Synthesis and Characterization of Cold Extruded Al/TiCp Metal Matrix Composite
19	K S Mahesh	Assistant Professor	B.E(Mech)	M.Tech (Maintenance Engg.)	-
20	Roopa D N	Assistant Professor	B.E (Material Science)	M.Tech (Master of Engineering Management)	-
21	Veeresh B R.	Assistant Professor	B.E(Mech)	M.Tech (Machine Design)	-
22	Umamaheshwar Hebbal	Assistant Professor	B.E (Mech.)	M.Tech (Thermal Power Engineering)	-

23	Prajwal M	Assistant Professor	B.E (Mech.)	M.Tech (Design Engineering	-
24	Dr. Santhosh Kumar B M	Assistant Professor	B.E (Mech.)	M.Tech (Design Engineering)	Study of Mechanical and Thermal properties of AL-7075 Alloy Based composites
25	Praveen Kumar U B	Assistant Professor	B.E (Mech.)	M.Tech (Product Design & Manufacturing)	-
26	Marulasiddeshi H B	Assistant Professor	B.E (Mech.)	M.Tech (Thermal Engineering Systems Technology)	-
27	Bharath M N	Assistant Professor	B.E (Mech.)	M.Tech (Machine Design)	-
28	Dilip Kumar R	Assistant Professor	BE (IP& E)	M.Tech (Maintenance Engineering)	-
39	Kalmeshwar Ullagaddi	Assistant Professor	BE (IP& E)	M.E (Machine Design)	-

# **Technical Staff**

SI. No.	Name	Qualification	Designation
1	Mr. Manju C.M	BE (Mechanical Engineering)	Foreman
2	Mr. L.V. Janamatti	ITI (Fitter)	Instructor
3	Mr. S.S.Prasanna.	ITI (Fitter)	Instructor
4	Mr. Kanthappa S	DME	Instructor
5	Mr. K.S.Manjesh	DME	Instructor
6	Mr. Suresh.M.P.	DME	Instructor
7	Mr. Mallesh T V	DME	Instructor
8	Mr. Shivakumar S	BE (Mechanical Engineering)	Instructor
9	Mr. Sachin.P	DME	Instructor
10	Mr. Lingaraju. M.N	DME	Instructor
11	Mr. Bhaskar.R	BE (Mechanical Engineering)	Instructor

## **Supporting Staff**

SI. No.	Name	Qualification	Designation
1	Puneeth S	ITI(Fitter)	Lab Helper
2	Balamahadevaswamy B N	ITI(Fitter)	Lab Helper
3	C M Kishor	ITI(Fitter)	Lab Helper
4	Mohan H P	ITI(Fitter)	Lab Helper
5	Veerabhadraswamy R	ITI(Fitter)	Lab Helper
6	Yogesha K S	ITI(Fitter)	Lab Helper
7	Mahesh B	ITI(Fitter)	Lab Helper
8	Mahendra G S	ITI(Fitter)	Lab Helper
9	Nagaraju B S	B. A	Attender

# **Departmental achievements**

## **Events Organized**

SI. No.	Event	Resource person	Date
1	3D Point Cloud to 3D PrintableObjects (Invited talk, online)	Dr. H R Mahadevaswamy Joint Director-TED, JSSMVP, Mysuru	29.04.2021
2	Drone-Fundamental Concepts,Applications, and Case studies(invited talk, online)	Sri. K.V. Srinivasan Sc 'G' (Retd), Emeritus Scientist, ADE,DRDO, Bengaluru	17.12.2020
3	The Role of Mechanical Engineers in Aerospace Domain (invited talk, online)	Dr. Madeva Nagaral, Deputy Manager, Aircraft Research and Design, HAL, Bengaluru.	12.12.2020
4	Industry 4.0 (invited talk, online)	Mr. Prasanna Shivaramaiah, Head – Delivery, Digital Business Unit, M/s. Cyient, Bengaluru	02.12.2020

# • AICTE Sponsored Five-day online Faculty Development Program on "3D Printing & Design" from 1-5 February, 2021.



The program was inaugurated on 1<sup>st</sup> February 2021 by Padmashri Dr. PrahladaRamarao, Former Scientist, DRDO; Dr. H R Mahadevaswamy-Joint Director - TED, JSS MVP-Mysuru; Dr. Mrityunjava V Latte, Principal and Dr. Bhimasen Soragaon, Head of Department & the program coordinator.

#### • Three-day workshop on "Building Research Eco System" from 2-4 March, 2020.

Department of Mechanical Engg., JSS Academy of Technical Education, Bengaluru has organized a 3day Workshop on Building Research Eco-System for all faculties of JSS S&TU, Mysuru, JSSATE, Bangalore & Noida on 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> March, 2021. The program was conducted in blended mode (offline mode for JSSATE, Bengaluru and online for JSSATE, Noida & SJCE, Mysuru) with the support of Technical Education Division, JSS Mahavidyapeetha, Mysuru for the faculty members of JSS Technical institutions.

The program was inaugurated by Dr. B Suresh, Pro Chancellor, JSSAHER, Mysuru and was presided by Dr. C G Betsurmath, Executive Secretary, JSSMVP, Mysuru. Dr. Siddaramaiah, Vice chancellor, JSS S&TU, Mysuru, Dr. S A Dhanaraj, Registrar, JSS S&TU, Mysuru and Dr. H R Mahadevaswamy were invited as "Guests of Honours". Dr. Mrityunjaya V Latte, Principal JSSATE, Bengaluru welcomed the gathering.



#### Screen shot of the session

Dr. C. G. Betsurmath, Executive Secretary, JSSMVP, Mysuru presided over the inaugural program. In his presidential address, he highlighted the necessity of building research ecosystem and insisting the research culture in academic institutions. Dr. H R Mahadevaswamy, Joint Director, Technical Education Division, JSSMVP, Mysuru briefed about objectives and necessity of organizing this workshop.

#### • A workshop on 'Digital Pedagogy' was organized on 10.06.2021.



The workshop was organized jointly by JSSATE, Bengaluru & JSSATE Noida on 10.06.2021. The target audience were all the teaching and non-teaching staff of both the institution. The resource person was **Dr. Srinath S.,** Associate Professor, Dept. of CS&E, SJCE, Mysuru. Dr. H R Mahadevaswamy, Joint Director – TED, Mysuru along with the Principal of JSSATEB and JSSATEN chaired the session

#### Prof. B T Nijaguna Memorial Webinar Series - 2020

The Department of Mechanical Engineering organized Prof. B T Nijaguna Memorial webinar series - 2020 from 13 -15 July 2020. The objectives are to bring the awareness about the latest trends in various aspects of mechanical engineering Viz. design, thermal, production, and management. The speakers were from the premier institutes and industries of the country. 60 participants including students, faculties, and industry persons from all over the country at tended the webinar



Screenshots of Prof. B T Nijaguna Memorial Webinar Series - 2020

- "Transition from conventional refrigerants to new refrigerants", by Dr. G S V L Narasimham, Senior Research Scientist, Department of Mechanical Engineering, IISc, Bengaluru, on July 13, 2020.
- "Vehicle Aerodynamics" by Dr. S. N. Sridhara, Professor & Director, School of Engineering and Technology, Amity university, Gurgaon, Haryana, on July 13, 2020.
- "ERP Products and their Applications" by Mr. Timmana Gouda Mulemane, Director, M/s. Ariviga Technologies Pvt. Ltd., Bengaluru, on July 14, 2020.
- "Trends in renewable energy" by Mr. Basavaraj K, Deputy Manager Towers & Electric, M/s. ENERCON, Bengaluru, on July 14, 2020.
- "Objective Oriented Design and Analysis Through Finite Element Method & Crash Analysis Requirements" by Dr. D. Mallikarjuna Reddy, Associate Professor & Head, Department of Design & Automation Vellore Institute of Technology, Vellore, Tamilnadu, on July 15, 2020
- "CNC Machining & Programming" by Mr. B. G. Suresh, General Manager, Manufacturing Engineering, M/s. Mahindra Two Wheelers Ltd., Dhar, M P, on July 15, 2020.

#### Webinars

- Webinar on "MasterCAM for Education", on October 05, 2020 by Mr. Sitansu Mohanty, Technical Director, Mastercam India.
- Webinar on "Machine Tool Operations using MasterCAM", on October 05, 2020 by Mr. Deepak Kumar, Manager-Industry programs, Cadmaxx solutions Pvt Ltd, Bengaluru.
- 250 participants from all over the country attended the webinar.





Screenshots of the session

#### 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. Dr. Bhimasen Soragaon, HOD-ME, welcomed the resource person, the office bearers of IIF, The Bangalore Chapter and the attendees. Dr. Siddappa P N., Asst. Professor, introduced the speaker to the attendees and proposed vote of

thanks. Dr. Siddappa P N. and Mr. Srikantamurthy J S., Asst. Professors coordinated the webinar. There were about 270 registrations to the webinar and about 120 (about 75 were from industry) participants all over India attended the webinar. The webinar was conducted in Cisco Webex digital platform.

#### **Faculty Achievements**

- Dr. Gowreesh S S, delivered a talk on "Intellectual Property Rights Know Your Rights" for faculty members of JSSATE, Bengaluru on December 02, 2020.
- Dr. K S Anil Kumar, recognized as a reviewer for Scopus indexed conference proceedings journal "Materials Today Proceedings", Elsevier Publisher, for International Conference on Advanced Materials Behavior & Characterization (ICAMBC-2020).

#### **Academic Audit**

• The academic audit was conducted online on December 1, 2020 with an external audit member Dr. Rammohan Y S., Professor., B M S College of Engineering, Bengaluru.

#### Parent – Teacher Meet

The department organized Online Parent-Teacher Meeting on September 5, 9 and October 17, 2020 for III, V and VII semester students

The objective of the meeting was:

- To create a common platform between parents and teachers to discuss the issues related to the academic progress of the students.
- To address the students & parents, also, to seek their suggestions in the wake of speculations on Covid-19.

SI. No.	Date	Alumni Interaction	Resource Person
1	17.03.2021	"Opportunities for Higher Studies"	Mr. Rajesh Raghavan Energy Engineer, Grand Rapids, Michigan.
2	19.05.2021	Career Orientation – Start-up Success & Failure Models	Mr. Ullas L M Senior Executive - Spare parts Inventory & Logistics at Phillips Machine Tools India Pvt. Ltd., Bengaluru
3	09.06.2021	Experience and Knowledge Sharing	Mr. H S Manjunath Project Delivery Experts M/s. Tracey Brunstrom & Hammond Pvt. Ltd., Melbourne, Australia

## **Alumni Interaction**

# Journal Publications

## Journal Publications: 2021

- Reddy, N. S., Subramanya, S. G., Vishwanath, K. C., Kanchiraya, S., Satheesha, V., & Karthikeyan, M. (2021). Analysis of tube-in-tube copper helical heat exchanger to improve heat transfer. Materials Today: Proceedings.
- Kumar, K. A., & Yogesha, K. B. (2021). Experimental investigations to find the effect of post weld heat treatment (PWHT) on the microstructure and mechanical properties of FSW dissimilar joints of AA2024-T351 and AA7075-T651. Materials Today: Proceedings. (WoS and Scopus)
- JP. Savina, B.V. Raghavendra, D. Rangappa. Experimental investigation on mechanical and tribological behaviour of surfactant coated multi-walled carbon nano tubes reinforced aluminium 6065-silicon metal matrix composite. Lett. Mater., 2021, 11(1) 73-78, https://doi.org/10.22226/2410-3535-2021-1-73-78, (WoS and Scopus)
- Nanjundeswaraswamy, T. S. (2021). Nurses' quality of work life: scale development and validation. Journal of Economic and Administrative Sciences.(WOS)

- Nanjundeswaraswamy, T. S., & Swamy, D. R. (2021). Knowledge management processes and organizational culture in the higher educational technical institutions. Journal of Economic and Administrative Sciences.(WOS)
- Siddappa, P. N., Shivakumar, B. P., & Yogesha, K. B. (2021). Synthesis and characterization of cold extruded AI/TiC metal matrix composite produced by stir casting technique. Materials Today: Proceedings. (WoS and Scopus)
- J. S. Srikantamurthy, Anandkumar R. Annigeri, and Raghavendra B. V., Free Vibration Analysis of Layered Magneto-Electro-Elastic Truncated Conical Shells, Journal of Applied Science and Engineering, Vol. 23, No 4, 2020, pp:669-676, https://doi.org/10.6180/jase.2020\_23(4).0011. (WoS and Scopus)
- K.C.Anantha Padmanbham, Mruthunjaya. M, Darshan B.G (2021), Effect of Reinforcement, Load and sliding distance on AI-4.5% wt Copper Matrix Hybrid, International Journal of Engineering and Advanced Technology (IJEAT)
- Harish, U., Mruthunjaya, M., Naresha, K., & Madhu, G. (2021, February). Effect of the coating material compositions on the life of gas turbine hot section components. In AIP Conference Proceedings (Vol. 2316, No. 1, p. 030036). AIP Publishing LLC.
- Mruthunjaya M. & Yogesha K.B., "A review on conventional and thermal assisted machining of titanium-based alloy". MaterialsToday: Proceedings. (WoS and Scopus), April 2021. https://doi.org/10.1016/j.matpr.2021.03.490.
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- Siddesh Matti, B P Shivakumar, S Shashidhar and Madeva Nagaral, "Dry sliding wear behavior of Mica, Fly Ash and Red Mud particles reinforced Al7075 alloy hybrid metal matrix composites", Indian Journal of Science and Technology, Vol. No.: 14, Issue: 4, pp: 310-318, DOI: 10.17485/IJST/v14i4.2081, Feb.2021, Indexed by Web of Science.
- T S Nanjundeswaraswamy (2021) ,"Role of innovation in Quality Management Practices A frame work", gis.Science Die Zeitschrift fur Geoinformatik,Vol 8, Issue 5, Page No: 322-342, 20.18001.GSJ.2021.V8I5.21.37097 (Scopus)
- Chaya J Swamy, Vanishree Beloor, T S Nanjundeswaraswamy (2021), Recruitment and Selection Process in The It Firms, gis.Science - Die Zeitschrift fur Geoinformatik, Vol 8, Issue 5, Page No: 343-356, 20.18001.GSJ.2021.V8I5.21.37098 (Scopus)
- Nanjundeswaraswamy, T. S., Shilpa Divakar (2021). Determination of sample size and sampling methods in applied research. Proceedings on Engineering, 3(1), pp 25-32, DOI: 10.24874/PES03.01.003

## **Conference Publications:2021**

- Sri Sai P. Reddy, Rohan, Suresh, Hanamantraygouda M. B. and B. P. Shivakumar "Use of composite materials and hybrid composites in wind turbine blades", Int. Conference on Smart and Sustainable Developments in Materials, Manufacturing and Energy (SME 2020), NMAMIT, Nitte, Karnataka, Elsevier: Materials Today Proceedings, Feb. 2021, doi.org/10.1016/j.matpr.2021.02.745 Indexed by Scopus.
- Siddappa P.N., B.P. Shivakumar and Yogesha K.B., "Synthesis and characterization of cold extruded Al/TiC, metal matrix composite produced by stir casting technique", Int. Conference on "Smart and Sustainable Developments in Materials, Manufacturing and Energy (SME 2020), NMAMIT, Nitte, Karnataka, Elsevier: Materials Today: Proceedings, Jan 2021, doi.org/10.1016/j.matpr.2021.01.757 Indexed by Scopus.
- Anil Kumar K.S., & Yogesha, K. B. (2021). Experimental investigations to find the effect of post weld heat treatment (PWHT) on the microstructure and mechanical properties of FSW dissimilar joints of AA2024-T351 and AA7075- T651. Materials Today: Proceedings. (WoS and Scopus)

# **Journal Publications:2020**

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- B.M. Girish, B.P. Shivakumar, M.B. Hanamantraygouda, B.M. Satish, (2020). Wear behaviour of hot forged SiC reinforced aluminium 6061Composite materials, Australian Journal of Mechanical Engineering, DOI: 10.1080/14484846.2020.1714353, (WoS).
- Shivamanappa. G. Desai, Anandkumar. R. Annigeri and A. TimmanaGouda (2019). Analysis of a new single degree-of-freedom eight link leg mechanism for walking machine. Mechanism and Machine Theory, 140(October 2019), 747–764. DOI: 10.1016/j.mechmachtheory.2019.06.002
- Savina JP, Raghavendra BV. Investigation on Influence of Anionic Surfactant for Homogenisation of MWCNT in Aluminium 6065 Matrix, IIUM Engineering Journal, Vol. 21, No. 2, 2020. pp: 186-196.
- https://doi.org/10.31436/iiumej.v21i2.1317. (WoS and Scopus)
- B.V. Raghavendra, Hybrid Genetic Algorithm for Bi-Criteria Objectives in Scheduling Process, Management and Production Engineering Review, Volume 11, Number 2, June 2020, pp: 107–112. (Scopus)

- Mahendra Kumar, C. Raghavendra, B. V. Effect of carbon nanotube in aluminium metal matrix composites on mechanical properties, Journal of Engineering Science and Technology, Vol. 15, No. 2 (2020) 919 930. (WoS and Scopus)
- M. Prajwal, Yogesha K. B, Kalmeshwar Ullegaddi, K. G. Basava Kumar (2020), Energy Release Rate Evaluation of Bi-material Interface Cracks, Springer, e- Book chapter: Springer Proceedings in Materials, 8, pp: 781-792, DOI: https://doi.org/10.1007/978-981-15-7827-4\_79 (SCOPUS).
- Srikantamurthy J S, Veeresh B R, Gowreesh S Subramanya, Anandkumar R Annigeri, (2020). An Experimental Investigation on Pre-Processing of Areca Leaf for Shredding Using a Domestic Mixer, International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies, 11(8), Paper ID:11A8B. DOI: 10.14456/ITJEMAST.2020.143
- Anil Kumar, K.S., Murigendrappa, S.M., and Hemantha Kumar (2019). Experimental investigation on effects of varying volume fractions of SiC nano particle reinforcement on microstructure and mechanical properties in friction- stir-welded dissimilar joints of AA2024-T351 and AA7075-T651. Journal of Materials Research, 34(7), 1229-1247, DOI: 10.1557/jmr.2018.445, (SCI Indexed, WoS and SCOPUS).
- B. G. Prashantha, D. R. Swamy, Bhimasen Soragaon, and T. S. Nanjundeswaraswamy, "Design Optimization and Analysis of Thermoacoustic Refrigerators", International Journal of Air-Conditioning and Refrigeration, Vol. 28, No. 03, 2020, pp. ...
- Santhosh Kumar.B.M, D.P.Girish, Yogesha K.B, M.C.Jeevan "Influence of hybri reinforcement on thermal conductivity of Al7075 based composites" Materials Research Express, Volume No.:6, Issue No.:1,Year: Nov. 2019, Page No.:1-9 (WOS)
- Ullegaddi, K., Mahesha, C. R., & Shivarudraiah. (2019). Tribological Properties of Basalt Fibers A Review Materials Science Forum, 969, 335–342. https://doi.org/10.4028/www.scientific.net/msf.969.335. (Scopus).
- Patil N., Shivarudraiah, Amaresh Kumar D., Ullegaddi K. (2020) Effect of Autofrettage on the Properties of the Aluminium Cylinders. Intelligent Manufacturing and Energy Sustainability. Smart Innovation, Systems and Technologies, vol. 169. Springer, Singapore. https://doi.org/10.1007/978-981-15- 1616-0\_36. (Scopus).
- Ullegaddi K., Mahesha C.R., Shivarudraiah (2020) Influence of Graphene and Tungsten Carbide Reinforcement on Tensile and Flexural Strength of Glass Fibre Epoxy Composites. Intelligent Manufacturing and Energy Sustainability. Smart Innovation, Systems and Technologies, vol. 169. Springer, Singapore. https://doi.org/10.1007/978-981-15-1616-0\_37. (Scopus).

- Prajwal M., Yogesha K.B., Ullegaddi K., Basava Kumar K.G. (2020) Energy Release Rate Evaluation of Bi-material Interface Cracks. In: Praveen Kumar A., Dirgantara T., Krishna P.V. (eds) Advances in Lightweight Materials and Structures. Springer Proceedings in Materials, vol 8. Springer, Singapore. https://doi.org/10.1007/978-981-15-7827-4\_79 (Scopus).
- Patil N., Shivarudraiah, Ullegaddi K. (2021) Numerical Analysis of Autofrettaged High-Pressure Aluminium Cylinder. Advances in Industrial Automation and Smart Manufacturing. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-4739-3\_53. (Scopus).
- Venkatesh BN, M.S.Bhagyashekar (2020). "Influence of Friction Stir Welding Process Parameters on Mechanical Properties of AA6061-9 wt.% SiC Composites", Advances in Lightweight Materials and Structures, Springer, Volume 8, Page No: 683-693, DOI: 10.1007/978-981-15-7827-4 (WoS and Scopus).
- Nanjundeswaraswamy T S, Nagesh P, Swamy D R (2020). Leadership Styles in Mediating the Relationship Between Quality of Work Life and Employee Commitment. International Journal for Quality Research, 14(2). DOI: 10.24874/IJQR14.02-04 (WoS and SCOPUS)
- Rashmi S, Swamy DR, T S Nanjundeswarswamy, (2020). Quality Management Practices in Oil and Gas Industry (2020), International Journal for Quality Research 14(2) DOI: 10.24874/IJQR14.02-06, (WoS and SCOPUS)
- Beloor, V., Swamy, C. J., Nanjundeswaraswamy, T. S., Swamy, D. R., & Nagesh, P. (2020). A study on job satisfaction and employee welfare in garment industries. Indian Journal of Science and Technology, 13(33), 3445-3456. (WoS)
- Design Optimization and Analysis of Thermoacoustic Refrigerators. International Journal of Air-Conditioning and Refrigeration. doi.org/10.1142/S2010132520500200. Volume No. 28, IssueNo.03. (WoS and SCOPUS)
- Mahesh, B. P., and T. S. Nanjundeswaraswamy (2020) "Quality of Work Life of Employees in Corporate Sector of India." Volume 11 No.12, DOI: 10.14456/ITJEMAST.2020.241
- Nanjundeswaraswamy, T. S., Kavya, M. A., & Sanjana, C. M. (2020). Job Satisfaction of Employees Working in Manufacturing SMEs. Proceedings on Engineering, 2(1), 13-20. pp 13-20, doi: 10.24874/PES02.01.002

- Nanjundeswaraswamy, T. S., Sanjana, C. M., & Kavya, M. A. (2020). Employee retention in manufacturing units. Proceedings on Engineering, 2(1), 3-12. pp 3-12, doi: 10.24874/PES02.01.001
- Yogesha K. B., Siddappa P. N., B. P. Shivakumar, Mruthunjaya M. "Mechanical and Tribological Characterization of Hybrid Composites: A Review", Materials Today Proceedings from Elsevier, May2020. (WoS & Scopus), https://doi.org/10.1016/j.matpr.2020.03.357.
- G.M.Swamy, Dr. T.S Nanjundeswaraswamy (2020), Using Taguchi Approach Optimization of Surface Roughness and Cutting Tool Flank Wear in Turning and Drilling Operations, gis. Science -Die Zeitschrift fur Geoinformatik, Vol 7, Issue 12, Page No: 1197-1208, DOI:20.18001.GSJ.2020.V7I11.20.36224,(SCOPUS)

## **Conference Publications:2020**

- Siddesh Matti, B.P. Shivakumar, (2020). Effect of Hybrid Reinforcement on Mechanical Behavior of Al7075 based Composites, Proc. of 2nd International conference on Advances in Mechanical Engineering Sciences - ICAMES 2K20, PES College of Engineering, Mandya, (Scopus).
- K.S. Anil Kumar, H. Rajneesh & H.C. Madhu (2020) Experimental investigations on effect of tool welding speed on microstructure and tensile properties of FSW dissimilar joints reinforced with SiC nano particles. International conference on Industrial and Manufacturing Systems (CIMS), 9th-11th October, 2020, Dr. Ambedkar National Institute of Technology Jalhandhar (NITJ), Punjab.
- Anil Kumar, K.S., H. Rajneesh, & H.C. Madhu (2019). Effect of SiC nano particles on grain stability of friction stir processed AA7075. International Conference on Materials and Manufacturing Methods (MMM 19), National Institute of Technology, Trichy held from 5th-7th July, 2019. Materials Today Proceedings, (Scopus Indexed conference proceedings), DOI: 10.1016/j.matpr.2019.11.028
- M. Prajwal, K. B. Yogesha, Kalmeshwar Ullegaddi and K. G. Basava Kumar, "Energy Release Rate Evaluation of Bi-material Interface Cracks", Advances in Lightweight Materials and Structures, Vol. 8, 2020. Springer, Singapore
- Venkatesh BN, M.S.Bhagyashekar paper titled "Studies on Microstructure and Mechanical Properties of Friction stir Welded AA6061 Composites Containing SiC", in National E-Conference on Innovative processing methods for synthesizing advance structure and functional materials (NEC-IPSASFM-2020) at HKBK college of Engg, on 8/10/20 to 9/10/20
- Umamaheshwar Hebbal," Performance analysis of nanofluid based photovoltaic thermal (PVT) solar collectors: A review", International conference on "Recent advances on renewable energy",2020, Bluerose Publishers.

# **Department of Civil Engineering**

#### About the Department

The Department of Civil Engineering was established in the year 2009, with the vision to produce responsible, technically qualified professionals with ethical and human values by providing excellent teaching learning and research. The department is accredited to National Board of Accreditation (NBA) with a current intake of 60. The department has to its credit a team of qualified, experienced and dedicated faculty members. At present department have 8 faculty members with PhD degree and remaining faculty members in the department are carrying out their research work. The main aim of the department is to equip the students with the knowledge and expertise to grow professionally and contribute significantly to the society. Department has established membership with professional bodies, such as Indian Concrete Institute (ICI) Bengaluru centre, Association of Consulting Civil Engineering (ACCE (I)) Bengaluru Center and Builders Association of India (BAI) Bengaluru Centre.

The Department of Civil Engineering has established a good relationship with core Civil Engineering Industries. Department is coordinating with more than 25 companies which are offering internship and placement opportunities to the students. The department regularly organizes Webinars, Student development programs, Faculty development programs, Conferences, seminars and Workshops for the betterment of the students and Civil Engineering fraternity.

#### Vision

To produce responsible, technically qualified professionals with ethical and human values by providing excellent teaching-learning and research.

#### **Mission**

- 1. Impart fundamental technical knowledge through learner-centric teaching methodology.
- 2. Empower student and faculty by involving in co-scholastic and research activities.
- 3. Equip students to face socio-technical challenges with ethical and human values.

#### **Program Educational Objectives**

PEO 1: Apply the knowledge of science and technology to achieve sustainability in construction.

- PEO 2: Able to plan, analyze, Design, execute and manage civil engineering works.
- PEO 3: Involve in research and professional consultancy with ethical and societal responsibilities.

#### **Program Specific Objectives**

- PSO 1 Impart practical knowledge in planning, analysis, design and construction management.
- PSO2 Function as a professional engineer and contribute towards betterment of the society.

PSO3 Function as an individual or in a team to find solutions for civil engineering problems of multidisciplinary nature in the context of environmental and sustainable development

# Admission statistics

Year	Sanctioned Intake	Actual Admitted	CET (Opening & Closing Rank)
2020-21	120	52	65225-147828
2019-20	120	67	4484 - 136201
2018-19	120	71	8759 - 31166

## **Placement statistics**

Year	No. of students placed
2020-21	-
2019-20	07
2018-19	30

# **Accreditation Status**

• The Department is accredited by NBA, New Delhi, for the period of three years from 2020-2023, till 30.06.2023

# **Faculty Members**

SI. No.	Name	Designation	UG	PG	Ph.D.
1	Dr. Nagabhushana	Professor	B.E (Civil)	M.Tech.(Structural Engineering)	Behaviour of concrete and structural elements using crushed rock powder as partial and full replacement to natural sand.
2	Dr. Santhosh B S	HOD & Associate Professor	B.E (Civil)	M.Tech.(Structural Engineering)	Studies on Rheological properties of cement concrete mixer using Concrete Shear Box test.
3	Dr. Sanjay Shekar N C	Associate Professor	B.E (CTM)	M.Tech (Remotes Sensing & GIS)	Modeling evapotranspiration using remotely sensed spatial contextual information.
4	Dr. Hemalatha H N	Assistant Professor	B.E (EE)	M.Tech (Environmental	Treatment ofTextile (Silk) industry Wastewater using

				Engineering)	electrochemical coagulation and membrane bioreactor.
5	Dr. Vivek S	Assistant Professor	B.E (Civil)	M.E (Geotechnical Engineering)	Reuse of plastic waste for enhancing the strength properties of soils an experimental investigation.
6	Dr. Abdul Razak B H	Assistant Professor	B.E (Civil)	M.Tech.(Structural Engineering)	Experimental Investigations on Rheological, Strength and Durability Characteristics of Blended Concrete.
7	Dr. Shashikumara S R	Assistant Professor	B.E (Civil)	M.E (Construction Technology)	Investigation on polymer modified hybrid fibre reinforced concrete.
8	Mrs. Rashmi S M	Assistant Professor	B.E (Civil)	M.Tech (Highway Engineering)	-
9	Mr. Abhishek R	Assistant Professor	B.E (Civil)	M.Tech (Construction Engineering & Management)	-
10	Ms. Harshitha M N	Assistant Professor	B.E (Civil)	M.Tech.(Structural Engineering)	-
11	Mr. Pramukh N	Assistant Professor	B.E (Civil)	M.Tech (Transportation Engineering & Management)	-
12	Mrs. Apoorva S	Assistant Professor	B.E (Civil)	M.Tech.(Structural Engineering)	-
13	Mr. Basavaraj Akki	Assistant Professor	B.E (Civil)	M.Tech (Highway Engineering)	-
14	Ms. Archana J	Assistant Professor	B.E (CTM)	M.Tech (Construction Technology)	-
15	Dr. P Nagabhushana	Assistant Professor	B.Sc.	M.Sc. (Geology)	Evaluation of ground water potential zones and water chemistry of Halaguru & Satnuru watershed in Ramanagara & Mandya district by using remote sensing and GIS.

# **Technical Staff**

SI. No.	Name	Qualification	Designation
1	Yashumathi V	DCE	Instructor
2	Keerthi Kumara K N	DME	Instructor
3	Jhenkar S K	DCE	Instructor
4	Mahesha	DCE	Instructor
5	Tejashwini K S	DCE	Instructor
6	D P Prakash	ITI	Helper
7	Mahadevaswamy S	ITI	Helper
8	Mahadevaswamy M	ITI	Helper
9	Vinay M S	ITI	Helper
10	Mahadevaswamy B	ITI	Helper
	Support	ing Staff	
1	Chaluvaraju V	SSLC	Attender

# **Departmental achievements**

# MoU signed

- MoU signed between Department of Civil Engineering and M/s Clear Water Dynamics Pvt. Ltd.on 01.10.2020.
- MoU signed between Department of Civil Engineering and M/s Klarheit Valuers and Engineering Services Pvt Ltd. on 01.10.2020

## **Events organized**

SI. No.	Event Name	Resource persons	Date
1	Webinar on "Professional challenges and job opportunities for Civil engineers in 21 <sup>st</sup> Century"	Prof. Shyam Agasthya, National University of Science and Technology, Muscat, Republic of Oman	18.06.2021
2	Webinar on" Importance of GIS and GPS in Engineering"	Dr. D.C. Lingadevaru Scientific Officer, Karnataka State Remote Sensing Application	11.06.2021

		Centre, Bengaluru	
3	Special lecture on "Fundamentals of Remote sensing and its importance in Engineering"	Prof. Leka Thomas, Faculty- PG programme of Remote sensing and GIS, Karnataka State Remote Sensing Application centre, Bengaluru	04.06.2021
4	Expert talk series on "Project Management using Primavera"	Mr. Vidyashankar M N, PGDBA – Marketing, PMP Consultant	28.05.2021
5	One day Webinar on "GREEN CAMPUS"	Dr. Aswath M.U President, Association of Consulting Civil Engineers (India) Mrs Supriya Thyagarajan Managing Principal, Perkins Eastman Green Educational projects in the USA and India. Mr Mahesh Basavanna, Managing Director, McD Built Environment Laboratories Pvt. Ltd. Mr Autif Mohammed Sayyed, Project Lead – India Green Buildings Program, International Finance Corporation ArVasudevan R Kadalayil, Principal Architect, Ecumene Habitat Solutions Pvt. Ltd	29.01.2021
6	One-week online FDP on "Image and Signal Processing"	Dr. P M Shivkumarswamy Professor, Department of Electronics & Communication, JSSATEB Dr. SudarshanPatilkulkarni Professor, Department of Electronics & Communication, JSS Science and Technology University, Mysuru Dr. KarthikUpadhya Research Engineer, Espoo, Finland Dr. Raju Aedla Research Scientist (Remote Sensing), Kumamoto University, Kumamoto, Japan Dr.Ganasri B P GIS Analyst, Atmos Energy Corporation, Dallas, Texas, USA	04.01.2021 to 08.01.2021
7	International webinar on topic "Smart and Sustainable Cities in	Prof. M N Sreehari Chief Executive Officer,	19.09.2020

	India (Issues and Challenges)"	M/s CIE & M/s TECS, Bengaluru	
8	A Webinar Session on "Writing a Research Article – Vital Tips for Beginners"	Dengaturu Dr. R. Ramesh Nayaka M.Tech. (IIT Madras) and Ph.D. (UM, Malaysia) Assistant Professor Department of Civil Engineering, National Institute of Technology (NIT), Warangal – 506004, (T.S), India	19.08.2020

# Faculty achievements

The following faculty members were conferred with Ph.D. during the academic year 2020-21.

-		
SI. No.	Faulty Name	
1	Dr. Sanjay Shekar N C	
2	Dr. H N Hemalatha	
3	Dr. Abdul Razak B H	
4	Dr. Vivek S	
5	Dr. Shashi Kumara S R	

## **Journal Publications**

Award of Ph. D

SI. No.	Title of paper	Author/s	Name of journal	Year of publication
1	Performance comparison of Penman-Monteith and Priestly-Taylor models using MOD16A2 Remote Sensing product	Dr Sanjay Shekar N C and Dr Hemalatha H.N.	Pure and Applied Geophysics Journal, Springer Publication	DOI: 10.1007/s00024- 021-02780-5, June 2021
2	Land use and Land Cover Characteristics using Bhuvan and MODIS Satellite Data	Dr Sanjay Shekar N. C. and Dr Hemalatha H.N.	International Journal of Recent Technology and Engineering (IJRET)	ISSN: 2277-3878, 9 (5), 289-2942021
3	Design of sanitary landfill site and incineration unit for municipal solid waste management.	Dr. Hemalatha H N, HarshithNagesh, Santosh V S, Venkatesh K	International Journal for Research in Applied Science & Engineering Technology (IJRASET)	Volume 8 PP 457- 460, Issue VIII Aug 2020
4	Influence of GGBS on Mechanical Properties of Low Traffic Concrete Paver Blocks	Abdul Razak B.H., Gowri Ramesh, Impana P, Sharath K R, Yadhunandan B	International Journal for Research in Applied Science & Engineering Technology	Vol. 8(2), 2020, pp 2914-2920.

5	Pre-peak Flexural Performance Evaluation of Fiber Reinforced Concrete Beams	Shashi Kumara S. R., B.C. Udayashankar, D.L. Venkatesh Babu,	International Journal of Advanced Science and Technology,	Vol 29, No. 8, 2020, pp 1980-1985
6	Strengthening of weak subgrade using Geo nailing technique	Rashmi S M, K. Bharathreddy , T. Bhanuteja , G. C. Dhanush	International Journal of Research in Engineering, Science and Management (IJRESM)	Volume 3,Issue 8, May 2020
7	Traffic analysis and parking survey	Rashmi S M, R. Suhas , D. Ravi Kiran , P. S. Darshan, A. Tharun	International Journal of Research in Engineering, Science and Management (IJRESM)	Volume 3, Issue 8, May 2020
8	Effect of Partial Replacement of Construction Industry Waste Materials in Concrete	Dakshayini R S, Sachin K C and Abhishek R	International Research Journal of Engineering and Technology (IRJET)	Vol. 7, Nov 2020.
9	Study on effect of recycled plastic waste as replacement to the fine aggregate	Harshitha M N, Deviprasad Y, Shashank S M, Achyut Joshi, Mallikarjun S M	International journal for research in applied science and engineering technology	Volume-8 Issue-8, December, 2020
10	Study on Utilization of Plastic Waste in the Construction of Flexible Pavement	Pramukh N, R L Prajwal, B M Darshan, S Sunil Kumar, C L Santosh	International Journal of Research in Engineering, Science and Management (IJRESM)	Volume-03, Issue-07. July-2020
11	Seismic analysis of high-rise building G+24 using Etabs	Apoorva S, Ajay K R, Bhavyashree R, Lokesh M, Prithvirani S	International Research Journal of Engineering and Technology (IRJET)	ISSN: 2395-0056, Volume: 07 Issue: 08   Aug 2020
12	Experimental Study on Durability of Concreteby Partial Replacement of Cement withSugarcane Bagasse Ash	Archana J, G.Sadan, V. Ravikumar, E.Lateesha	International Journal of Research in Engineering, Science and Management (IJRESM)	Volume-3, Issue-7, July-2020
13	Stabilization of Black Cotton Soil using Terrazyme Enzyme	Basavaraj Akki, Bheemareddy, Prathap Pandit, Ramya M, Yamini N	International Journal for Research in Applied Science & Engineering Technology (IJRASET)	Volume No. 8, Issue No. VIII, 2020

# **Conference Publications**

SI. No.	Name of the teacher	Title of the paper	Title of the proceedings	Name of the conference	National / International	Year of publica tion
1	Pramukh N	Role of Shape and Size of Aggregates in Marshall Properties of HMA"	SelectProcee dings of ASCM 2020	National Conference on Advances in sustainable construction materials (ASCM 2020)	National	2021
2	Dr. Santhosh B S	Evaluation of strength properties of high volume fly ash concrete incorporating nanomaterials	AIP Conference Proceedings 2204	International Conference on emerging research in Civil, Aeronautical and Mechanical Engineering	International	2020
3	Rashmi S M, Basavaraj Akki	Performance Studies on white topping layers over flexible pavement	IOP conference Series	International Conference on Recent Advancements in Engineering and Management (ICRAEM- 2020) 9-10 October 2020, Warangal, India	International	2020
4	Rashmi S M Dr Santhosh B S	Study on comparison of life cycle cost between white topping and bituminousoverlays	Proceeding of International Conference (Virtual) on Civil EngineeringT rends and Challenges for Sustainability (CTCS 2020)	International Conference (Virtual) on Civil EngineeringTr ends and Challenges for Sustainability (CTCS 2020)	International	2020
5	Abhishek R, Shashi Kumara SR	Factors Influencing Productivity of Construction Labour – A Survey	Proceeding of International Conference (Virtual) on Civil EngineeringT rends and Challenges	International Conference (Virtual) on Civil EngineeringTr ends and Challenges for Sustainability (CTCS 2020)	International	2020

			for Sustainability (CTCS 2020)			
6	Apoorva S	Comprehensive analysis of Outrigger system for high rise structures subjected to wind and earthquake loadings	Proceeding of International Conference (Virtual) on Civil EngineeringT rends and Challenges for Sustainability (CTCS 2020)	International Conference (Virtual) on Civil EngineeringTr ends and Challenges for Sustainability (CTCS 2020)	International	2020

# Consultancies

SI. No.	Client	Nature of Work	Consultant	Date	Amount (Rs.)
1	Er.Ramachandra K M/S Civiltech, Bengaluru	Water quality test	Dr Hemalatha H N	16-04-2021	1000
2	Mr. Harish D S #146, South end road, Jayanagar, Bangalore-69	Concrete cubes compressive strength	Dr Santhosh B S	12-02-2021	1062
3	Suraj Builders Pvt. Ltd., Mysuru& M/s Karnataka Redy Con Mix, Mysuru	Non-Destructive Testing	Dr. Shashikumara S R and Abhishek R	02-02-2021	10000
4	Er. Ullas A No.179/1, sunkadakal village, kottur taluk, BallariDistrict- 583134	Foundation drawing and column marking	Dr. Shashikumara S R and Abhishek R	28-01-2021	2500
5	M/S KRC Groups #8, Industrial area, Kubalgudu, Bengaluru - 74	Rebound hammer test	Dr. Shashikumara S R and Abhishek R	14-10-2020	3304
6	Mr Vinay Rajarajeshwari Layout, Nagadevanhalli, Bengaluru - 56	Concrete Cubes Compressive strength	Dr. Santhosh B S	12-10-2020	531
7	Er Shivashankar Founder Rathna Construction, Dommasandra, Bengaluru - 25	Planning and scheduling of construction activities for residential project	Abhishek R and Shashikumara S R	06-10-2020	2000

## **Department of Electronics & Instrumentation Engineering**

#### **About the Department**

The Department of Electronics and Instrumentation Engineering was established in the year 1997 for facilitating training in Instrumentation Engineering under Bangalore University. Presently, it is offering under graduate course in E & IE to cater curriculum as prescribed by Visvesvaraya Technological University, Belagavi, Karnataka, India. Electronics and Instrumentation Engineering is a multidisciplinary undergraduate programme which deals with Science and Technology. The department is recognized as VTU research Centre from 2011. Presently ten research scholars have registered for Ph.D. in the Centre. In today's world of technological advancements, Electronics and Instrumentation Engineering plays a vital role in aircraft instrumentation and control, digital signal processing, biomedical instrumentation and processing, distributed control systems, process controls and automation, robotics, embedded systems, MEMS technology etc. The department when started in 1997, was affiliated to Bangalore University with an intake of 60 students. Since 1998, it is affiliated to VTU, Belagavi. Being one of the key departments, it has a student population of 240 who learn to develop methods of measuring, processing and controlling of signals in various process industries. The students also learn the latest technologies like VLSI design and communication systems along with programming skills to stay in par with Electronics and IT industries. Knowing the ever-growing importance and fast changing technical requirements, we have set up laboratories with state-of-the-art facilities to give an in-depth exposure to the students on practical aspects. They are also trained in calibration and use of automated equipment. The department provides exclusive library facilities for the students. The department has a professional students' association "INSTRA" – Instrumentation Association under which a techno-cultural fest "Anantham" and a State Level Project Exhibition & Technical Paper Presentation "Sanrachana" are organized every year. The Dept. also has a Socio-Welfare Unit "ABHYUDAYA"" under the banner INSTRA, which is started for a social cause.

#### Vision

To become globally competent in the field of Electronics and Instrumentation Engineering through education, research & personality development.

#### Mission

- 1. Provide quality education by enriching students with technical knowledge and skills through holistic learning environment and state-of-the-art facility.
- 2. Encourage students to pursue higher education and engage themselves in research and development.
- Instil students with professionalism and ethics who can work to fulfil the needs of industry & society.

#### **Program Educational Objectives**

- PEO 1: To strengthen the concepts and fundamentals of Instrumentation Engineering.
- PEO 2: To prepare graduates for the design and development of innovative instrumentation systems through value added courses and workshops.
- PEO 3: To prepare graduates for successful career in Instrumentation industries and R&D organization to solve engineering problems.
- PEO 4: To prepare graduates who will exhibit teamwork & leadership with effective communication skills in inter-disciplinary projects.

#### **Program Specific Objectives**

- PSO 1 Apply the appropriate programming constructs for solving engineering problems.
- PSO 2 Able to utilize appropriate knowledge, skills and modern tools for designing advanced instruments in multidisciplinary environment to cater to industrial and societal needs.

## Admission statistics

Year	Sanctioned Intake	Actual Admitted	CET (Opening & Closing Rank)
2020-21	60	32	38343-201470
2019-20	60	35	20636-129447
2018-19	60	46	17417-66943

#### **Placement statistics**

Year	No. of students placed
2020-21	08
2019-20	20
2018-19	27

#### **Accreditation Status**

• The Department is accredited by NBA, New Delhi, for the period of three years from 2018 -2021, till 30.06.2021

# Faculty Cadre

No. of Faculty members	Professor	Associate Professor	Assistant Professor
09	01	01	07

# **Faculty Members**

SI. No.	Name	Designation	UG	PG	Ph.D.
1	Dr. D Jayadevappa	Professor and Head	B.E. (IT)	M.Tech (Biomedical Instrumentation)	Development and Performance Evaluation of Medical Image Segmentation Algorithms
2	Dr. D Mahesh Kumar	Associate Professor	B.E. (IT))	M.Tech (Biomedical Instrumentation)	Assessment of Autonomic Nervous System (ANS) by analysis of Heart Rate Variability (HRV) for various addictive and life style modifying disorders
3	Dr. Nagesha	Assistant Professor	B.E. (IT))	M.Tech (Industrial electronics)	Wireless sensor networks
4	Mr. B R Renukumar	Assistant Professor	B.E. (IT))	M.Tech (Biomedical Instrumentation)	-
5	Mrs. K S Bhanumathi	Assistant Professor	B.E. (IT)	M.Tech (VLSI Design and Embedded Systems)	-
6	Mr. P Praveen	Assistant Professor	B.E. (IT)	M. Tech (Biomedical Signal Processing and Instrumentation)	-
7	Mrs. Harshitha S	Assistant Professor	B.E. (ECE)	M.Tech (Signal Processing and VLSI)	-
8	Mrs. Sowmya M S	Assistant Professor	B.E. (IT)	M.Tech (Industrial electronics)	-
9	Mrs. Nagarathna N	Assistant Professor	B.E. (ECE)	M.Tech (Digital Electronics and Communication)	-

# **Technical Staff**

SI. No.	Name	Qualification	Designation
1	Mr. H.S.Basavanna	ITI	Instructor
2	Mr. Mahesha	Dip E&C	Instructor
3	Mrs. Deepa Biradar	Dip E&C	Instructor
4	Mr. Chandan. N	Dip E&C	Instructor
5	Ms. Kavya.N	Dip. IS&T (B.Sc. IT)	Instructor
6	Mr. Vijayakumara.H.S	B.E. E&C	Instructor
7	Mr. Lokesh.B.	ITI	Lab Helper
8	Mr. Vinoda Kumara	ITI	Lab Helper
9	Mr. Manjunatha.M	ITI, B.A.	Lab Helper

# **Events organized**

SI. No.	Webinar	Date	Resource person with Designation
1	Webinar on "Gate Awareness Program" 09.0		Mr. Sanjeev Kumar and team The GATE Academy Pvt. Ltd., Bengaluru
2	Webinar on "Building AI on ARM Cortex Devices for IoT Applications"	21.12.2020	Mr. Rohit Prajapathi CTO, Digitoad Technologies
3	Webinar on "The Most Valuable Resource in the World is Data"	25.09.2020	Mr. Lokesh Banagir Digital Transformation Leader, Senior IT Professional, Bangalore

• Two Weeks Faculty Development Programme on "Opportunities & Challenges in Entrepreneurship" from 15.03.2021 to 27.03.2021

#### **Journal Publications**

- D. Jayadevappa, Subodh S Ingaleshwar & Nagraj V Dharwadkar, "Heterogeneous architecture for Reversible for Watermarking System for Medical Images using Integer transform based Reverse Contrast Mapping", International Journal of Computer Network and Information Security, MECS, Vol. 12 No. 6 October 2020.
- D. Jayadevappa, Satish Tunga, Gururaj C & Harshitha, "Luminosity and Contrast Adjustment Based Enhancement of Diabetic Retinal Images", Open Biomedical Engineering Journal, Bentham Science, 06.10.2020
- P.Praveen, Dr.Mallikarjunaswamy M.S., Dr.Chandrashekara S, "Quantification of Intervertebral Space of Lumbar Spine in Lower Back Pain Affected People", International Journal of Future Generation Communication and Networking, Science and Engineering Research Support Society (SERC), NADIA, PO BOX 5075, SANDY BAY, TASMANIA, AUSTRALIA, 7005, 01.11.2020
- 4. D Jayadevappa, Komala K & Shivaprakash G, "Human Emotion Detection and Classification Using Convolution Neural Network", European Journal of Molecular & Clinical Medicine, EJMCM formarly handled by Elseveir
- Subodh Ingaleshwar, Nagaraj V. D & Jayadevappa D, "Water chaotic fruit fly optimization-based deep convolutional neural network for image watermarking using wavelet transform", Multimedia Tools and Applications, Springer, 05.02.2021, https://doi.org/10.1007/s11042-020-10498-0
- T. Channa kesava & D. Jayadevappa, "Segmentation of Brain Tumor using Contourlet Transform and Chan-Vese Active Contour Model Approach", European Journal of Molecular & Clinical Medicine, Ubiquity Press, UK, February 2021
- Vijayalakshmi V, D Mahesh Kumar, S C Prasanna Kumar, "NDVI COMPUTATION OFLISS III IMAGESUSING QGIS, Information Technology in Industry, SERSC, ISSN (Print): 2204-0595ISSN (Online): 2203-1731,DOI: https://doi.org/10.17762/itii.v9i1.29
- Bhavana P, Harshitha S, Bhuvana V, Deeksha, K Sameeksha, "A Survey on Regenerative Braking Systems and other Smart Safety Systems in Electric Vehicle", Journal of Huazhong University of Science and Technology, 04.03.2021.

 Deeksha S Kodige, Sowmya M S , Apoorva Hegde , Navya Sree MR and Anjali J Makwana, "A Detailed Review of Smart Technologies to tackle Viral Pandemic, Journal of Huazhong University of Science and Technology, 17.03.2021

# **Faculty Achievements**

## Patent

Dr. D Mahesh Kumar, has published an Indian patent with the title of the invention being "System to monitor Temperature of granary using narrow band Internet of Things", on 12.03.2021.

# **Students Achievements**



Atishay M (1JS16EI007) secured 4<sup>th</sup> Rank



Afifa Parveen (1JS16EI001) secured 10th Rank

# KSCST funding for student's project

- 1. Ms. Deeksha, Ms. Bhavana P , Ms. Bhuvana V, Ms. K Sameeksha, "Regenerative Braking System with Security Application in Electric Vehicles using IoT", under the guidance of Harshitha S, received funding amount of Rs. 5500.00.
- Ms. Keerthnashri, Ms. Apoorva Basavaraddar , Ms. Nikitha B Rao, "Low-Cost Emergency Ventilator", under the guidance of Mrs. Bhanumathi K S & Dr. D Jayadevappa, received funding amount of Rs. 7000.00.
- 3. Mr. Syed Moin Ahmed, Ms. Amruthavalli, Ms. Siri Manasa Manjunath, Ms. Vaishnavi K, "Integrated IoT and Android Operated Versatile Battlefield Surveillance Robot for Military Application, under the guidance of Dr. D Mahesh Kumar, received funding amount of Rs. 6000.00.

# **Department of Industrial Engineering and Management**

#### About the Department

The Department of Industrial Engineering and Management was established in 1997, with an intake of 60 and is currently headed by Dr W Yerriswamy. Industrial Engineering and Management (IEM) program is a blend of Mechanical Engineering and Management. The department imparts education in the field of Industrial Engineering and Management to the students through its well established Undergraduate and Research programmes. A Research Centre under Visvesvaraya Technological University, Belagavi, offers M.Sc. Engineering by Research and Ph.D. programs. The department has laboratory facilities with modern equipment that help in carrying out research in the areas related to Mechanical and Industrial Engineering.

#### Vision

To be a centre of excellence in the field of Industrial Engineering and Management emphasizing on training, research and consultancy for societal development.

#### Mission

- 1. To equip graduates for developing integrated systems for enhancing Productivity.
- 2. To establish a centre for carrying out training, research and consultancy and also fostering entrepreneurship.
- 3. To build a strong network with reputed organizations in academia and industry.
- 4. To evolve graduates for lifelong learning to gain knowledge, acquire skills and nurture creativity.

#### **Program Educational Objectives**

- PEO 1: Be successful in improving operations, processes, practices and systems by solving complex engineering, organizational and societal problems for achieving professional excellence.
- PEO 2: Develop competency, knowledge and attitude to adapt to changing roles of Industrial Engineers.
- PEO 3: Be able to exhibit the motivation and ability to acquire contemporary professional skills & knowledge and pursue lifelong learning.
- PEO 4: Develop entrepreneurial / intrapreneur skills combined with creative, innovative and ethical practices to create products, processes, systems, and organizations for sustainable and inclusive growth of the society.

## **Program Specific Objectives**

- PSO 1: Demonstrate the fundamental knowledge of Industrial Engineering and Managerial Skills to solve systems problems.
- PSO 2: Design and develop integrated systems to meet the specified needs of society with due considerations for environment, public health & safety and professional ethics.

- PSO 3: Evaluate alternatives through research-based investigation with the aid of IE tools and techniques for effective decision making.
- PSO 4: Function and manage effectively in a diversified work environment for social innovations leading to sustainable growth.

## **Admission statistics**

Year	Sanctioned Intake	Actual Admitted	CET (Opening & Closing Rank)
2019-20	60	23	39531-139658
2018-19	60	43	34806-113082

#### **Placement statistics**

Year	No. of students placed
2019-20	29
2018-19	20

#### **Accreditation Status**

• The Department is accredited by NBA, New Delhi, for the period of three years from 2018 - 2021.

# **Faculty Cadre**

No. of Faculty members	Professor	Associate Professor	Assistant Professor
07	01	02	04

#### **Faculty Members**

SI. No.	Name	Designation	UG	PG	Ph.D.
1	Dr. Swamy D R	Professor	B.E (Mech)	M.Tech. (Engg. Mngt)	Advanced Manufacturing Technology ISO certification and Human Resource Management Practices in Mechanical Manufacturing SME's
2	Dr. Vijay Kumar M	Associate Professor	B.E (Mech)	M.Tech. (Production Engineering Systems technology)	Dynamics Scheduling of flexible manufacturing systems using genetic algorithm to achieve optimal performance."

3	Dr. W. Yerriswamy	Associate Professor	B.E (IP&E)	M.E. (Production Management)	Studies on process capability analysis and integrated approaches and perspectives of it
4	M R Prabhushankar	Assistant Professor	B.E (Mech)	M.Tech. (Maintenance Engineering)	-
5	U. Krishnaprasad	Assistant Professor	B.E (Mech)	M. Sc (Engg. by Research)	-
6	Dr. Rashmi. S	Assistant Professor	B.E (IEM)	M. Sc (Engg. by Research)	Quality Management Practices and Quality of work Life in Manufacturing SMEs.
7	Vanishree Beloor	Assistant Professor	B.E (IP&E)	M.Tech (Production Management)	-

# **Technical Staff**

SI. No.	Name	Qualification	Designation
1	Kumar S Purtageri	Diploma	Foreman
2	Manjunatha	Diploma	Instructor
3	K B Raghu	ITI	Instructor
4	Sundaresh R	ITI	Instructor

# **Supporting Staff**

SI. No.	Name	Qualification	Designation
1	Mahesh S	ITI	Lab helper
2	Gurumurthy S S	ITI	Lab helper
3	Nagaraju M K	ITI	Lab helper

# **Departmental achievements**

Following research scholars of IEM Department were awarded with Doctorate degree from VTU, Belagavi.

 Rashmi. S, has completed Ph.D. Viva voce on 06.02.2021 and was awarded Doctorate on 03.04.2021 for Mechanical Sciences from Visvesvaraya Technological University, Belagavi, under the guidance of Dr. D R Swamy and Dr. T S Nanjundeswaraswamy.

- Manu G, has been awarded Ph.D. on 3<sup>rd</sup> April 2021, for Mechanical Sciences from Visvesvaraya Technological University, Belagavi under the guidance of Dr. M Vijaykumar.
- Mallaradhya H M has been awarded Ph.D. on 3<sup>rd</sup> April 2021, for Mechanical Sciences from Visvesvaraya Technological University, Belagavi, under the guidance of Dr. M Vijaykumar.

## **Funded Projects**

- The department received a grant of Rs 3,92,157/- for Data Analytics Lab under MODROB scheme from AICTE for two years from date of sanction i.e., 20<sup>th</sup> July 2020 coordinated by Dr. M Vijay Kumar, Associate Professor, Department of IEM, JSSATEB.
- Karnataka State Council for Science & Technology (KSCST) sanctioned amount of Rs 7000/- for student project titled "Electro – Pneumatic Auto Tool Changer for industrial robots" under the guidance of Dr W Yerriswamy.

SI. No.	Faculty Name	Work Title	Client Name and Address, Ph. No	Amount (Rs.)
1	Dr. Swamy. D. R U. Krishnaprasad	Safety Audit	M/s. SIGMA ALDRICH CHEMICALS Pvt., Ltd., (MERCK) Plot No-12, Bommasandra, Jigani Link Rd, Bommasandra Industrial Area, Bengaluru -560099. Phone: 080 - 662 19400	1,06,200-00
2	Dr. Bhimasen Soragaon Dr. Yerriswamy W	Quality Assurance at heat treatment plant	Thermo Tech,Unit -2,Heat treatment Plant. No.72, I st Main Road, Industrial Subhub, 2 <sup>nd</sup> , Stage, Yeswanthpur, Tumkur Road,Bangalore- 560022	25016-00

# Consultancy

## **Journal Publications**

- Rashmi Srinivasaiah, Swamy D R, and U Krishna Prasad (2021), Impact of DST-FIST Funding on Research Publications in India (2000-2020) – A Bibliometric Investigation in Journal of Scientometric Research (Accepted for publication)
- Dr M Vijaykumar and Mallaradhya H M (2021), Optimization of Parameters and Prediction of Response Values Using Regression and ANN Model in Resistance Spot Welding of 17-4 Precipitation Hardened Stainless Steel by in Journal of Advanced Manufacturing Systems published by World Scientific journals.

- Swamy Devappa Renuka, Rashmi Srinivasaiah (2021), Lean manufacturing: A Bibliometric analysis,1970-2020 in Journal of Scientometric Research, ISSN:Print -2321-6654, Online - 2320-0057, DOI: 10.5530/jscires.10.1.8.
- TS Nanjundeswaraswamy, Swamy Devappa Renuka, Rashmi Srinivasaiah (2021), A study on Quality of Work Life of employees in LPG bottling plant in Brazilian Journal of Operations & Production Management, Volume 19, Issue1, Pg. numbers 1-13. https://doi.org/10.14488/BJOPM.2021.036
- V Beloor, CJ Swamy, T S Nanjundeswaraswamy, D R Swamy, P Nagesh (2020), A study on job satisfaction and employee welfare in garment industries, Indian Journal of Science and Technology 13 (33), 3445-3456
- B G Prashantha, D R Swamy, B Soragaon, T S Nanjundeswaraswamy, (2020), Design Optimization and Analysis of Thermoacoustic Refrigerators, International Journal of Air-Conditioning and Refrigeration.
- T S Nanjundeswaraswamy, D R Swamy, P Nagesh, (2020), Leadership Styles in Mediating the Relationship Between Quality of Work Life and Employee Commitment, International Journal for Quality Research 14 (2)
- Rashmi Srinivas, D R Swamy, T S Nanjundeswaraswamy, (2020) Quality Management Practices in Oil and Gas Industry, International Journal for Quality Research 14 (2).
- Mallaradhya, Vijay Kumar M "Microstructural analysis of 17-4 Precipitation hardened stainless steel at welded spots" accepted for publication in Journal of Manufacturing Systems, world Scientific journal.2020.
- Vijay Kumar M, Ajay Kumar B.S, Pranitha Madalli "Experimental Evaluation of Mechanical and Metallurgical Properties of Grey Cast Iron" in international conference on Industrial and Manufacturing Systems held on 9th – 11th October 2020 at Dr B R Ambedkar National Institute of Technology, Jalandhar.

# **Student Achievements**

# **University Ranks**



Bhumika S - 6th rank



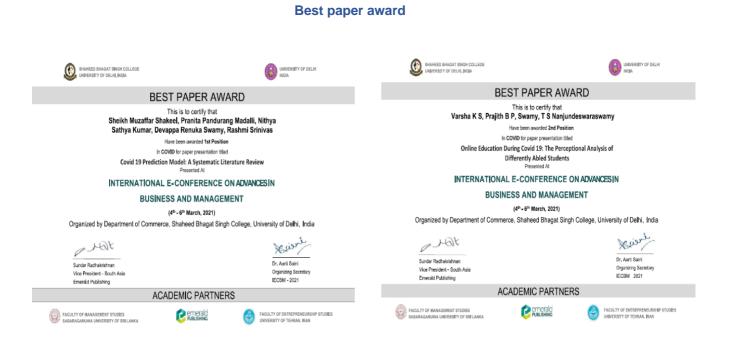
Ashwin Krishna S -8th rank

- Karnataka State Council for Science & Technology (KSCST) sanctioned amount of Rs. 7000/- for student project titled "Electro – Pneumatic Auto Tool Changer for industrial robots" under the guidance of Dr. W Yerriswamy, Associate Prof. & HOD.
- Namratha Kulkarni, 3<sup>rd</sup> year student has been selected for paid internship and training for two years from 2020-2022 at Prabha Industries, Kumbalgod Industrial Area, Bengaluru, coordinated by Dr. Swamy D R and Prof. U Krishna Prasad.

# **Student publications**

- Bhuvana R, Varshitha H (2021), Lean manufacturing: A Bibliometric analysis, 1970-2020 in Journal of Scientometric Research, ISSN:Print -2321-6654, Online - 2320-0057, DOI: 10.5530/jscires.10.1.8.
- Bhuvana R, Varshitha H, final year students, published a paper titled "Scale Development and Validation of Safety Engineering Systems in Major Hazardous Industries" in the journal of International Journal of Safety and Security Engineering, Year: October, 2020 Vol:10, Issue:05, Page no:699-706. DOI: https://doi.org/10.18280/ijsse.100515 (Impact Factor: 0.322).
- Varshitha H, final year student, published a paper on "Design validation of high inertia generator Rotor" in the Journal of AIP Conference Proceedings 2316, 030005 (2021); DOI: https://doi.org/10.1063/5.0038271 (Impact factor: 0.415).
- Kruthi C B, Poorvika G, final year students presented a paper on "Identification of Components for the Evaluation of Funded Research Project" – A Systematic Literature Review under the guidance of Dr. Swamy D R in International E-Conference on Advances in Business and Management at Shaheed Bhagath Singh College, University of Delhi on 4th – 6th March, 2021 (online mode).
- Samanth M V, Vrushank A, Hemchand J, final year students, presented a paper titled "Scientific Social Responsibility"- A Systematic Literature review under the guidance of Dr D R Swamy and Dr. Rashmi S in International conference on contemporary issues in Business management, organized by Sikkim Manipal University of Technology, Sikkim. on 5th & 6th March 2021(online mode).
- Aishwarya S P and Priyanka H from 2nd Year presented a paper titled "Systematic Review on Quality of Work Life of Teachers" under the guidance of Dr D R Swamy and Dr. Rashmi S in International E-Conference on Advances in Business and Management at Shaheed Bhagath Singh College, University of Delhi on 4th – 6th March, 2021 (online mode).
- Pallavi N Bhat, Vanishree Beloor, T S Nanjundeswaraswamy presented paper titled" Impact of COVID 19 on Indian Agricultural Value Chain" in 10th International Online Conference on "Impact

of COVID-19" on Local and Global economy and Recovery Strategies in June 2020, Sai Ram Institute of Management Studies, Chennai. (INCON) and was awarded as Best Research Paper.





## "Certificate of Commitment"

C M Champak, 2<sup>nd</sup> Year student, volunteered help during the Covid-19 crisis and has been recognized with "Certificate of Commitment" for demonstrating his commitment to promote safety against Covid19, and he has also been awarded a certificate of participation for his extraordinary commitment to the "Voice 101 during Covid-19"- Webinar Series.



#### **Cultural Events**

Aishwarya S P, Amshumanth Hebbar, Priyanka H, Sankarushana R, our talented students have made us proud by taking part in Inter college fests by representing JSSATEB at CMRIT and R V College of Engineering, Bengaluru as a part of the college drama team 'Meraki'.

## **Sports Achievements**



Sanath L Reddy, 2<sup>nd</sup> year student was awarded as "best bowler" in State Level Tennis ball cricket tournament organized by JP Nagar cricket team Organizers, Bengaluru on 30-31 Jan 2021.



Sanath L Reddy, 2<sup>nd</sup> year student was awarded as "Man of the series" for his overall performance in State Level Tennis Ball Cricket Tournament under 21 organized by Team VIRUS, Bengaluru on 20-21 February 2021.



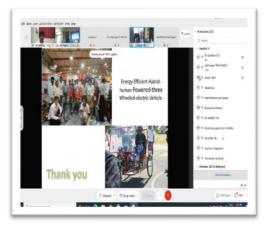
Gaurav J, Gautham J, Gautham Kumar V and Savin P,final year students of IEM participated in Tejaswi Surya Football cup in the Open category held in Bengaluru South from December 25 to 27 2020 and became qualifiers for Tejaswi Surya cup.

## **Events Organized**

## **Guest Lectures**

 An invited talk by Mr Harsh Chirania, Indian Foreign Service officer, Seychelles, topic "SAMEEP, Students and Ministry of External Affairs Engagement Programme on 19th May 2021. A total of 99 participants attended the session.

- An invited talk by Mr. Siddarth Chaitanya, Content Strategist consultant, M/s Unbox Experience on "Creativity- Breaking the mould" on 2nd June 2021. A total of 77 participants attended the webinar that helped students and attendees to build a sense of creativity and innovation.
- An invited talk by Mr. Satish Kumar, a visiting faculty at NMIMS (Bangalore) on GDP, GNP, GST and TAXES on 25<sup>th</sup> November, 2020. It was of great help to the students who were interested to pursue a career in Finance & Accounting. A total of 27 participants attended the session.
- A short workshop on "Operations Research using Excel" by Mr. Udupa, Excel trainer on 27<sup>th</sup> November, 2020 for 3<sup>rd</sup> and 4<sup>th</sup> year students to increase their knowledge in the field of Operation Research. A total of 30 participants attended the session.



# Webinar

One-day webinar on "Green Campus", was organized by Dr. Swamy D R, Professor, Department of IEM, on 29<sup>th</sup> January 2021, from 3 PM to 5:30 PM. Over 3200 participants participated.

# Master of Business and Administration

#### About the Department

The Department of Management Studies was established in 2004 under the umbrella of JSS Academy of Technical Education, Bengaluru sponsored by JSS Mahavidyapeetha, Mysore. The department follows Outcome Based Education Philosophy in Teaching and Learning process. The department offers two years MBA program affiliated to VTU, Belagavi, and Karnataka and recognized by AICTE, New Delhi. It has VTU recognized doctoral research centre established in the year 2008. Four Doctoral degrees are awarded so far and three scholars are pursuing their PhD program in the department. The MBA program operates with 60 students in take with seat sharing matrix of 50% from PGCET, Government of Karnataka and 50% Management Quota through K-MAT and or PGCET with socially subsidized fee. The MBA program follows frequently updated syllabus prescribed by VTU and offers electives in the area of Finance, Marketing and Human Resources as dual specialization. The department is equipped with well stocked library supplemented by Wi-Fi facility. The department has a blend of highly experienced and young faculty members with research bent of mind. The program has seven faculty members out of which four are Doctorates and the rest are pursuing doctoral degree. The average age is 40 years and average experience is 15 years. The students are encouraged to participate in various national level management fest, seminars, conferences, business plan and case study competitions and are also exposed to industry through market surveys and mini projects. The Department is headed by highly experienced Academic Administrator, Researcher and Management Professor for more than 25 years and Recognized Master Trainer of Outcome Based Education philosophy by NBA, New Delhi Dr. M.S. Ranga Raju a Doctorate in Management with basic Engineering degree.

#### Vision

To create competent Human resources for managing business in society.

#### Mission

- 1. By providing well balanced theory and practice courses leading to business management contemporary competency.
- 2. By sensitising the inner drive of entrepreneurial competency among students.
- 3. By imbibing and inculcating the investigative mindset and providing solutions to socially relevant business problems.

#### **Program Educational Objectives**

- PEO 1: Be a part of sustaining group, applying contemporary competencies in providing needy products and services to the society.
- PEO 2: Be a part of group of young entrepreneurs who try to support the supply of needy products and services to the society.
- PEO 3: Be a part of group of young research executives who try to find solutions to contemporary business problems of society.

# **Admission statistics**

Year	Sanctioned Intake	Actual Admitted	PG CET (Opening & Closing Rank)
2020-21	60	55	225-19999

# Faculty Cadre

No. of Faculty members	Professor	Associate Professor	Assistant Professor
07	01	01	05

# **Faculty Members**

SI. No.	Name	Designation	UG	PG	Ph.D.
1	Dr. M S Ranga Raju	Professor	BE	MEM, M.Phil., Ph.D.	Knowledge Management System
2	Dr. Suresh Naidu Boddu	Associate Professor	B.Sc.	MBA, Ph.D.	A comparative study on the performance of active and passive equity mutual funds in selected companies
3	Dr. Chandrakala V G	Assistant Professor	B.Sc.	MBA, Ph.D.	Retail Store Image and its impact on Consumer Behaviour with reference to Organized Apparel Retail Outlets at Bangalore
4	Dr. Lathamani B	Assistant Professor	B. Com	M.Com, MBA, M.Phil., Ph.D.	The Financial performance Appraisal of BSE listed Food Processing Industries
5	Mr. Balaji S	Assistant Professor	B.com	MBA	
6	Mrs. Chaya J Swamy	Assistant Professor	B.Sc.	MBA	
7	Mrs. Sowmya C U	Assistant Professor	BE	MBA	

# Supporting Staff

SI. No.	Name	Qualification	Designation
1	Mr. Puttananjappa	MA(Kannada)	Helper

# **Events organized**

SI. No.	Event	Date	Resource Person
1	Meet the Corporate Alumni	15/05/2021	Mr. Pradeep P Senior Analyst, SmartStream Technologies
			Dr. Pandu Naik, Consultant, Talent
			Avenues
2	Research Project Workshop	19/02/2021	Dr. Manoharan S, Faculty, BMSCE, Bengaluru
2	Research Floject Workshop	10/02/2021	Dr. Srikanth P, Faculty, Christ University
			Dr. G.Vijayakumar, Faculty, Christ University
			Mr. Anand S. Halagatti
3	Meet the CXO	06/03/2021	Business Manager-sales, Sonata Software Ltd.
			Mr. Sandesh Gowda P
4	Meet the Corporate Alumni	27/02/2021	Senior HR Executive
	·		Steer Engineering Pvt. Ltd.
			Dr. R. S. Deshpande, Former Director, ISEC,
			Bengaluru.
			Sri. Suresh Sagar, Panel Chair-Bankingand
_	Impact of Union Budget 2021	10/00/0001	Finance, KASSIA.
5		19/02/2021	Dr. J. R. Bangera, Former President,
			FKCCI.
			Sri. K. Pani, FCA, ICWA, Pani &
			Associates, Bengaluru
	Alumni Corporate	00/00/0004	Mr. Deepak Kumar, Consultant-Investment
6	ExperienceSharing session	06/02/2021	Performance & Reporting Northern Trust
-	A talk on Industry	04/04/0004	Dr. M.S Balaji
7	Transformation	21/01/2021	CEO–WhatxNxt Info-Excell Pvt Ltd,
8	A talk on Innovation and Creativity	21/01/2021	Dr. Ashwin Kumar, Chair Professor & Consultant (Karnataka Coffee Board)
9	A talk on the Path Way for Success	21/01/2021	Dr. Krishna, Corporate Trainer
10	Goal Setting and its importance	22/01/2021	Col. Vijaya Sarathi, VSM
	A talk on Innovation and		Dr. Achyuth Rao
11	Creative Thinking	22/01/2021	Former Director, National Institute of Design
10	Crossing the Psychological	22/01/2024	Dr. Mytra G.S.
12	Barrier	22/01/2021	Assistant Professor, JSSATE-B
	Alumni Corporate		Mrs. Sushma Raj,
13	ExperienceSharing	19/12/2021	Customer ServiceSpecialist
	session		CIVICA Justice Services, Australia

			Mr. Ravi Nagappa
			Finance BusinessPartner, NTT data Services
14	14 Nidhidhyasana-Finance 15/1	15/12/2020	Mr. Vikas Gowtham, Manager-HR, Fidelity
			Investments

# Publications 2020-21

- Lathamani B, V. Chandrashekhar "Application of Altman's Z Score Model to Assess the Financial Stability of select food processing industries listed in BSE, India, Journal of Science, February-2021. Doi: 10.35378/gujs.6916912.
- Chaya J Swamy, Vanishree Beloor, T.S. Nandundaswamy" Recruitment and selection process in the IT firms" in GIS Science Journal in May-2021, ISSN: 1869-9391
- Suresh Naidu Boddu "How Well do Investment Trusts Perform in India?" in Test Engineering and Management in Aug-20, ISSN: 0193-4120.
- MS Ranga Raju "Adopting Product Life Cycle Management Systems in Industries: A review of the barriers" in International Journal of Advanced Science & Technology in Aug-20, ISSN: 2207-6360.
- Chaya J Swamy" A study on job satisfaction and employee welfare in Garments Industries" in Sep-20, ISSN: 0974-6846

# **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 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.

SI.	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

## **Faculty Members**

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)	-	
	Technical Staff					
1	Mrs. Jyothi H R	Instructor	В.5	Sc., B.Ed.,	-	
2	Mr. Shivamurthy	Lab Helper	I.T.I		-	
	Supporting Staff					
1	Mrs.Shanthamma C	Attender	PUC			

# Publications

- Shashidhar R, Nityanand Choudhary, Influence of thickness and illumination on Electrical Properties of MOS capacitor of spray pyrolysed mixed phase CdTe2O5 - CdTeO3 - CdTe film, Emergent materials, 28th April 2021, pp:1-9. DOI:10.1007/s42247-021-00228-z.
- Abhilasha Singh, Pankaj Kumar Tripathi, Phase transition properties of ferroelectric and antiferroelectric liquid crystals, Philosophical Magazine, Volume:101, Issue:12, 26th April 2021, pp:1490-1509, DOI:10.1080/14786435.2021.1916115.
- Prasanna Kumar S, Sankarshan B M, Umesh T K, Effective Atomic Number and Effective Electron Density of some Composite Materials of Industrial Interest for Compton Scattering, Aegaeum Journal, Volume 8, Issue 9, Sept 2020, pp.582-585.
- Shashidhar R, Nityanand Choudhary, cost effective SnS heterojunction solar cells synthesized by spray pyrolysis, Sol Gel science & technology, Volume 96, September 2020, pp.188-196.

# **Department of Chemistry**

#### About the Department

The Department offers chemistry courses in the first year for all branches of Engineering and has highly qualified, dedicated senior faculty members. The department has contributed significantly to higher education and research in the area of Pure and Applied Chemistry. A good number of research articles in peer reviewed journals with high impact factor are published by the faculty members. The results of University examinations have been consistently excellent. The department has established a bio-diesel testing facility catalyzed by DST, New-Delhi and Peptide synthesis laboratory supported by VGST, Government of Karnataka. The major instruments in the department are Gas Chromatograph, Karl Fisher Analyzer, Rota-evaporator and FTIR Spectrophotometer. The prominent research areas are peptide synthesis, drug extraction from natural products, catalysis, biodiesel, nano materials and coordination chemistry. The department has conducted VTU-VGST sponsored Faculty Development Programme in the field of "recent trends in applied chemistry and nanotechnology". Popular lecture series are being conducted regularly for the benefit of students.

#### Vision

To empower the students with the fundamentals of chemistry for an active career in technical education and research.

#### Mission

- 1. To contribute quality education in applied chemistry.
- 2. To inculcate the significance of chemistry for research and innovation.

SI.	Name	Designation	UG	PG	Ph.D.
1	Dr. Rathna A	Professor & HOD	B.Sc. (PCM)	M.Sc. (Chemistry)	Theoretical studies on Fullerenes and Fullerene derivatives
2	Dr. Mahesh B,	Associate Professor	B.Sc. (PCM)	M.Sc. (Chemistry)	Facile methods of reduction by catalytic transfer hydrogenation and their applications to organic synthesis
3	Dr. Roopashree B	Assistant Professor	B.Sc. (PCM)	M.Sc. (Chemistry)	Synthesis and characterization of Transition Metal complexes containing substituted benzimidazoles and their Biological Activity,

#### **Faculty Members**

					Bangalore University	
4	Mrs. Kathyayani D	Assistant Professor	B.Sc. (PCM)	M.Sc. (Chemistry)	Pursuing	
5	Mrs. Puneetha J	Assistant Professor	B.Sc. (PCM)	M.Sc. (Ind. Chemistry)	Pursuing	
6	Dr. N.A. Chamaraja	Assistant Professor	B.Sc. (CBZ)	M.Sc. (Chemistry)	Development of new analytical methods for the assay of some enzymes, Mysore University	
Technical Staff						
1	Basavaraju B. R	Lab Instructor	MSc.,(Chemistry), PGDCA		-	

#### Departmental Achievements

- Department of chemistry has initiated in the preparation of Sanitizer in the pandemic situation for JSS institution in Bangalore.
- MOU has been signed with JSS College of Pharmacy, Mysuru, for research collaboration on 07.9.2020.

SL.NO	Faculty	Торіс	Date & Venue
1	Dr. Mahesh B	Delivered an Invited talk on "Advances in Smart Materials for Sensor and Energy Applications"	06.07.2020 to 10.07.2020, BMSIT, Bengaluru
2	Dr. Mahesh B	Delivered an invited talk on "Peptide-Based Functional Biomaterials for Biomedical Applications"	28/7/2020, SJBIT, Bengaluru
3	Dr. Mahesh B Delivered an Invited talk on "Recent trends in material science"		02.11.2020 to 06.11.2020. Sapthagiri College of Engineering, Bengaluru

## Faculty Achievements

## Award of Ph.D.

• Nanjundaswamy G.S was awarded with Ph.D. degree from Department of chemistry research center recognized by VTU under the guidance of Dr. Mahesh B.

## Publications

 Examination of miscibility characteristics of the synthetic plastic-mimetic peptide with polyacrylamide: development of nonwoven mats by electrospinning, Nanjundaswamy G S, Mahesh B, Channe Gowda D, Chamaraja N A & Gangadhar Angadi, Polymer-Plastics Technology and Materials, Vol. 60, No. 4, 405–418, 2021, doi.org/10.1080/25740881.2020.1811322

- Optical Performance Appraisal of Mechanically Flexible and Visibly Clear PVP-PVA/Calcium doped Zirconium Oxide Nanocomposites for UV Shielding Applications, H.V. Kavya, K.S. Nithin, B.K. Kendagannaswamy, S. Sachhidananda, N.A. Chamaraja, Vol. 227, Optic, November, 2021, doi.org/10.1016/j.ijleo.2020.166008
- Development and Validation of Spectrophotometric Methods for the Assay of Mirabegron in Bulk and Pharmaceutical Formulations, K. P. Roopa, K. Basavaiah, B. S. Shankara, and B. Mahesh, Journal of Applied Spectroscopy, Vol. 87, No. 6, January, 2021, doi.org/10.1007/s10812-021-01126-2.
- Investigation of photocatalytic degradation of crystal violet and its correlation with bandgap in ZnO and ZnO/GO nanohybrid, J Puneetha, Nagaraju Kottam, A Rathna, Inorganic Chemistry Communications, Vol. 125, March, 2021 //doi.org/10.1016/j.inoche.2021.108460.
- Synthesis and corrosion resistance properties of novel conjugated polymer-Cu2Cl4L3 composites, Ramanath Prabhu, B. Roopashree, T. Jeevananda, Srilatha Rao, Kakarla Raghava Reddy, Anjanapura V. Raghu, Materials Science for Energy Technologies, Vol 4 pg no. 92–99, (2021), https://doi.org/10.1016/j.mset.2021.01.001

#### **Department of Mathematics**

#### About the Department

The department supports the core departments in imparting quality education in Mathematics for both UG and PG courses. Mathematics is one which unifies all branches of science and technology and it reflects the spirit of rationality. Hence Mathematics plays a very significant role in shaping the career of an engineering student. Department has 8 qualified faculties of which six are doctorates and one is pursuing her Ph.D. The average teaching experience of the staff is around 18 years. The result of the Mathematics subject is consistently good and around 80% in the university examinations.

#### Vision

To be one of the best departments in providing the quality education in Science and Engineering.

#### Mission

- 1. To inspire students to gain in depth knowledge in Mathematics for engineering applications.
- 2. To establish the centre of excellence in pure and applied Mathematics involved in research.

SI.	Name	Designation	UG	PG	Ph.D.
1	Dr. C V Vinay	Professor & HOD	BSc. (PCM)	M.Sc., (Mathematics)	Study of Migration of Pollutants through Unsaturated and Saturated porous media
2	Dr. K M Ngaraja	Associate Professor	BSc. (PCM)	M.Sc., (Mathematics)	Studies on mathematical Inequalities
3	Dr. G S Mytra	Assistant Professor	BSc. (PCM)	M.Sc. (Applied Mathematics)	The Effect Constraints on Flow induced Morphological Instability in a Mushy Layers
4	Dr. Shalini M Patil	Assistant Professor	BSc. (PCM)	M.Sc., (Mathematics), M. Phil., (Applied Mathematics)	Finite difference based Multigrid Method to solve the Modified Reynold's Equation
5	Dr. B Umadevi	Assistant Professor	BSc. (PMS)	M.Sc., M. Phil (Applied Mathematics)	Mathematical Modeling of Macromolecular Transport in Doubly Connected Region (Bio Fluid Mechanics)

## Faculty Members

6	Dr. Girish N	Assistant Professor	BSc. (PCM)	M.Sc. (Mathematics). M.Phil. (Mathematics).	Numerical simulation of developing laminar free convection in a vertical double passage annuli
7	Mrs. Nandini P	Assistant Professor	BSc. (PCM)	M.Sc. (Mathematics).	
8	Mrs. Dhanya P	Assistant Professor	BSc. (PCM)	M.Sc. (Mathematics).	

## **Publications**

- Shalini M Patil & Vinay C.V, "Numerical approach to interpret the attributes of porous journal bearings using couple stress fluid", Industrial Lubrication and Tribology, Emerald Insight, UK, ISSN: 0036-8792, Year: 2020.
- K. M. Nagaraja, "The Ky Fan type inequalities for power exponential mean and its invariant", GIS Science Journal, Wichmann Verlag, Vol. 8, Issue. 1, Year: 2021.
- K. M. Nagaraja, "Inequalities for The Arguments Lying on Linear and Curved Path", Honam Mathematical Journal, <u>Jangjeon.</u> Mathematical Society, Vol. 42, Issue. 4, Year: 2020.
- K. M. Nagaraja, "Note on Different kinds of Schur convexities of Heinz type mean", Proceedings of the Jangjeon Mathematical Society, Vol. 23, Issue. 04, Year: 2020.
- K. M. Nagaraja & Dhanya P, "Identities on generalized Fibonacci and Lucas numbers, Notes on Number Theory and Discrete Mathematics", Bulgarian Academy of Sciences, Vol. 26, Issue. 03, Year: 2020.
- K. M. Nagaraja, "Centroidal mean labeling of graphs-II", Proceedings of the Jangjeon Mathematical Society, Jangjeon Mathematical Society Vol. 23, Issue. 03, Year:2020.
- Girish N, "Developing buoyant convection in vertical porous annuli with unheated entry and exit", Heat Transfer - Asian Research, Wiley Publishers, ISSN: 1523-1496, Vol. No: 49, Issue No: 5, pp: 2551-2576, Year: 2020.
- Girish N, "Fully developed mixed convection in vertical double passage porous annuli", Journal of Physics, Conference series: IOP Publishing, ISSN: 1742-6596 Vol. No: 1597, pp: 012050(1-10), Year: 2020
- P Nandini, "On a class of Harmonic Univalent functions associated with (p,q)- Salagean derivative", GIS SCIENCE JOURNAL, Wichmann Verlag, Vol. No: 7, Issue No: 9, pp: 753-769, Year: 2020

- P Nandini, "Coefficient estimates of certain classes of analytic functions of complex order by using q-Ruschweyh derivative", Journal of Ann. Univ. oradea fasc. math, Vol. No: 27, Issue: 2, Year: 2020
- P Nandini, presented paper on, "Coefficient bounds for certain subclasses of regular functions using (p,q)- derivative", International Conference on Advances in Mathematics and Computer science 2021, IMRF Institute of Higher Education and Research, Vijayawada, 16-17 April 2021, Andhra Pradesh, India. (online)
- P Nandini, presented paper "On Some results on certain subclass of Meromorphic functions associated with (p,q)-derivative", International Conference on special functions and Applications, Department of Mathematics & Computer Science, Babu Banarasi Das University, Lucknow, India.(online) 22-23 December 2020.

# **Book Chapter**

Title of the Chapter: The Analytical Study of Velocity Slip on Two-Phase Flow in an Eccentric Annular Region

Book title: Advances in Applied Mechanical Engineering Lecture Notes in Mechanical EngineeringPublisher: Springer, ISSN/ISBN/ PP/Year: 978-981-15-1201-8, 2195-4356, Chapter 26, pp. 223-231,Year: 2020

Author: Umadevi B and Co-Author: C V Vinay

# **Events Organized**

- 1. Crossing the psychological barrier, by Dr. G S Mytra, Assistant Professor, on 22 January 2021
- 2. Better World for Children, by Dr. Vijayalakshmi I Balekundri, Professor Emeritus of Pediatric Cardiology, Super Specialty Hospital, Bengaluru Medical College & Research Institute Residence



# ALUMNI REPORT



2020-21

#### About JSSATEB-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 1<sup>st</sup> alumni meet was held in 2012, Since then 3 meets were held. The 1<sup>st</sup> global alumni meet was held in the month of June 2021. It is also proposed to start JSSATEB Alumni chapters in other parts of India & worldwide.

The objectives are;

- To develop interaction or help to increase interaction between the Institute and alumni and also between present students and alumni of the institute.
- Enhance, modernize or upgrade the existing facilities at the institute to provide industrial training, student internships, placement and other facilities to the present students.
- Organise value added activities to the students such as personality development, guest lectures, seminars, research events etc.
- Grant scholarships for needy students and provide loans and other monetary and non-monetary assistance for deserving students for higher education.
- Provide consultations, services, testing facilities to industries associated with alumni.
- Encourage educational, cultural, sports and other activities.
- Publish journals, newsletters, books and other professional materials for circulation amongst its members.
- Assist the faculty and students of JSSATEB in various value-added activities like curriculum development, sponsored research projects, case study development, etc.
- Extend possible Corporate Social Responsibility (CSR) service to the local community.
- Help and encourage the alumni to achieve their professional goals.
- Help the institution for establishing a centre of excellence through the support of Alumni.

# Inaugural Function of JSSATEB Alumni Association

The inaugural function of JSSATEB Alumni Association (JSSATEBAA) through Online mode was held on Saturday, 3rd July 2021 from 10 am to 1 pm. The event was anchored by Vybhavi Janardhan from 2019 batch of EIE and Varsha Bhat from 2018 batch of CSE





Vybhavi Janardhan

Varsha Bhat

The event started with an invocation by Chaitra of 6<sup>th</sup> semester, EIE and the auspicious journey was followed by lighting of the lamp. Dr. B.P. Shivakumar, Dean Students Welfare welcomed the gathering.







# Lighting of Lamp



Dr. B.P. Shivakumar



Dr. Mrityunjaya V Latte

Our beloved Principal, Dr. Mrityunjaya V Latte, addressed the participants. He spoke about how the alumni are brand ambassadors of the institution, since they are the reflection of the past, present and the link to the future endeavours. He emphasised the importance of the technological era with the advent of social media and that the institution has harnessed the power of alumni through various networking platforms like LinkedIn, Facebook, Twitter, etc. He emphasised that the sole purpose of Alumni Association is to bring all the members of JSSATEB fraternity on a common platform. He mentioned that the main objective of the association is to provide a platform for interaction between alumni, students and faculty. He also expressed his views that the alumni is a huge talent pool, whose

guidance can be beneficial to the students and alumni themselves. They would also be of great help in building network for academic and professional enrichment. The association will help in fostering long term relationship between graduates and their alma matter for various activities.



The chief guest of the event, Shri N. Manjunatha Prasad, Principal Secretary, Revenue & Disaster Management, Government of Karnataka was introduced by Dr. D. Jayadevappa, Professor & Head, Dept. of EIE. Shri Manjunatha Prasad inaugurated the JSSATEB Alumni Association. Shri N. Manjunatha Prasad spoke of how the alumni are the brand ambassadors of the institution since they spread word about the institution, help the present students with their expertise in various domains, contribute in terms of networking and mentoring students. Shri Manjunatha Prasad mentioned that the Alumni Association is very important not only for graduates, but also for students. He conveyed his best wishes for the JSSATEB Alumni Association for the future endeavours.



## Dr. C. G. Betsurmath



## Alumni Website

Dr. C. G. Betsurmath, Executive Secretary, JSSMVP, Mysuru, also chief guest of the event was introduced by Mrs. Snehalatha, Assistant Professor, Dept. of CSE. Dr. Betsurmath inaugurated the website of JSSATEB Alumni Association. He stressed upon the significance of alumni meet, since it gives opportunity to meet the alumni and also provide them a chance to network with each other and the faculty. He mentioned that the alumni meet creates a special bonding between the faculty and alumni who have established themselves. Dr. Betsurmath expressed about how His Holiness and his blessings have made the JSS institutions a big name and said how the institution has always focused on making its students good human beings. Speaking of the Alumni of JSSATEB he said that they are present globally, and have left indelible prints in their domains and that he is proud and that they will always hold a special place in their hearts. Dr. Betsurmath encouraged the alumni to share their experiences, contribute to the college by training students, suggesting ideas, organising workshops and inspire students and junior faculty. He also urged them to come forward after the lockdown is over, to the college and cherish their memories.





Dr. H R Mahadevaswamy

Association Logo

Dr. Nagamani Purohit, Assistant Professor, Dept. of ISE introduced the guest of honour Dr. H. R. Mahadevaswamy, Joint Director, TED, JSSMVP, Mysuru, Dr. H R Mahadevaswamy addressed the gathering by giving suggestions and also inaugurated the logo of JSSATEB Alumni Association. He mentioned that, the Alumni, with their achievements and successes endure their alma matter with great power. Dr. Mahadevaswamy also said that, this virtual meet has brought the alumni and the present students on a common platform. The association aims at bringing all the Alumni who are running their own companies and have made a name for themselves in their respective domains together and to share their experiences and expertise for the development of the institute. He expressed his eagerness and said that he is looking forward for the formal membership of the alumni with association, launching of the quarterly newsletter and seeking their support for placements. Dr. Mahadevaswamy mentioned how it is very essential to have all the alumni in contact with the institution to have a positive impact on the development of students and institution.

The next guest of honour Mr Supreeth M G, Senior Consultant, Talent Acquisition, Capgemini was introduced by Mrs Chaya J Swamy, Assistant Professor, Dept. of MBA. Mr Supreeth M G felicitated Rajath M R (6th semester ISE), who developed the JSSATEBAA website. He also felicitated Ms. Bhavani M (2nd semester MBA) who designed the logo.



## Sri Supreeth M G

Mr. Supreeth spoke about his association with institution for more than 10 years and how big of a 'brand' JSS Institution has become globally. He also spoke about the great services rendered by the institution to the society whenever required, for instance, when JSSMVP provided isolation centres for COVID patients, to adopt the children who lost their parents to COVID.

Mr Supreeth spoke about how the alumni can help the graduating students to choose their career path, help to find jobs accordingly and guide them as much as they can. The MBA department has already started a 'Buddy Programme' that aims at each alumni guiding and training three students. He also requested all the alumni to be a part of the association to make it a grand success for the institution.

Alumni members invited to express their views about their stay in JSSATEB. Around 15 alumni shared their experience and the interaction they had with staffs and the institute.

- Sushmita G Bhat from 2015 batch of EIE spoke about how the alumni association will help the students with interviews and support graduates to build their career.
- Rukkayya from 2017 batch of MBA spoke about how there are opportunities and the alumni are always forthcoming to support the students even during pandemic. She also said that JSSATEB imparts skills among students to begin the career.
- Chandrika from 2020 batch of MBA mentioned that JSSATEB has provided a great learning experience along with quality education.
- Vidya Singh from 2006 batch of ISE spoke about how she got support from teachers for extracurricular activities and also from seniors. She also said that as an alumnus, they could support with hiring, skill development etc.,
- Shashank from 2014 batch of ISE said that the faculty were very good and always approachable. The way to give back to college was to address the students and talk about cloud technology.
- Vikram Parthan from 2005 batch of CSE mentioned that it is important to work on real life projects, engage in learning, be curious and stay in the present.
- Ajay from 2008 batch of CSE was of the opinion that a student should take guidance from the faculty.
- Nayana from 2019 batch of ECE said that the ambience in college was very good which helped in shaping career and character.
- Adithya from 2016 batch of M Tech (Gold Medallist) thanked the faculty for encouraging him and providing good knowledge.
- Dinesh from 2014 batch of Mechanical Engg. spoke about how alumni can give back by networking, knowledge sharing and innovation.
- R J Pradeep from 2008 batch of Mechanical Engg. spoke about how a journey of 1000 miles starts with a single step, also how as an alumnus, helping with Ted Talks and addressing students could help. He mentioned that teachers are like ladders, they ensure that all the students reach their aim and goals in life.
- Gautham Raj from 2015 batch of Civil Engineering spoke on how to make the best out of the limited resources to gain experience, knowledge and acquire skills to face the challenges.
- Aman Bhargava from 2008 batch of IEM appreciated the support he received from the department and as an alumnus, he would be glad to connect with the students and help them with the projects.
- First batch alumni Mr. Sriram S of IEM spoke about how when we step into a professional course, we do not know what it is about, we try to adapt and change our way of thinking and as an alumnus, to contribute and help the students in the current world, to shape lives and not just careers.

Mr. Rajath, gave a Demo of JSSATEBAA website and the process of registration. Mr Girish V, President of JSSATEB Alumni Association delivered the presidential address. He mentioned that JSSATEB has a rich heritage that started decades ago and the Alumni Association's lifelong engagement to reinforce the bonds. A lot of effort is put into launching the alumni association from the college and connecting with more alumni is possible. He said that there are some plans made for the association and collaborate with the institution for weekly and monthly activities for student development programs, create a virtual helpdesk for career guidance, internship certification program, and also by opening a blog or a forum to assist students by providing information.

Dr. Thejaswini P, Secretary of the Alumni Association and Assistant Professor, Dept. of ECE delivered vote of thanks. The event concluded with performance of cultural events by the VERVE team. Around 400 alumni from across the globe witnessed the event. The event was coordinated by Dr. P M Shivakumarswamy, Alumni Coordinator and Professor of ECE Dept. with the support of all the department Alumni Coordinators and Alumni Association Members. After the inaugural function the cultural team performed music event.

# 1. Debunking Relationship

The Department of Computer Science and Engineering organized a seminar on Debunking Relationships under Alumni Initiative on 20<sup>th</sup> Feb 2021.

**Mr. Shashank Nagesh**, Alumni of JSSATE, Bengaluru, also the Co-founder and CEO of M/s. Webtrigon Technologies Private Limited interacted with the students.



He emphasized on how to build relationships with friends, relatives and teachers in personal and professional. He enlightened the students regarding all the opportunities to elevate them academically. He emphasized on how to utilize effectively the opportunities and time during their academic tenure. He stressed on how to inculcate social concerns in student mind. He advised students to stick with the process to achieve the desired set goals. He also

emphasized on physical and mental health balance. He also briefed on how to cope up with the speed of advancement in technology in day-to-day activities.

# 2. Cloud computing for Real time applications

The Department of Information Science and Engineering organized an invited talk cloud computing for real time applications on 26<sup>th</sup> Feb 2021.

Mr. Suhas Nayak, Alumni of JSSATE, Bengaluru also Cloud App Specialist in Accenture delivered the talk.



The first session was on the importance of cloud computing. The impact of cloud in our daily routine was explained thoroughly. The types of cloud, along with the advantages and disadvantages, were briefed. The next session was on healthy mind and a healthy body. Focus on the goal; maintain consistency through hard work to achieve the goal were the takeaways from this session. He also mentioned all work and no play makes Jack a dull

boy. With respect to this he asked the students to take up some physical activities which will keep them going

## 3. College to Corporate Journey

 The Department of MBA & Research Centre organized an invited talk on College to Corporate Journey, 27 Feb 2021. Mr. Sandesh Gowda P, Senior Recruiter, Steer Engineering Pvt. Ltd, delivered the talk.

# 4. Opportunities for Higher Studies

The Department of Mechanical Engineering organized an Alumni interaction session on "Opportunities for Higher Studies" on 17 March 2021.

Mr. Rajesh Raghavan. Energy Engineer and Project Coordinator, Grand Rapids, Michigan.



In his talk, he introduced the field of energy engineering and his role as energy engineer in USA. The job opportunities for the field in the future for mechanical engineering. He also suggested the students to decide in advance, the university to join, the specialisation available and the job prospects in USA, as the cost of education in US is high.

# 5. Importance of Mathematics in Electrical and Communication Engineering

The Department of Electronics and Communication Engineering organised a technical talk on 20<sup>th</sup> March 2021.

Dr. Karthik Upadhya, Senior Specialist in Radio Research, Finland delivered the talk.



The session was on the importance of Mathematics in the Electrical and Communication. The significance of Mathematical modeling in modern design was explained thoroughly. A big-picture perspective of the role of mathematics in the field of electronics and communication engineering in terms of modeling, optimizing and analysing the systems was briefed with an example of radio design.

The optimization process and its main ingredients, viz., objective function and the constraints were also explained with examples. Also, some of the mathematical tools like Linear algebra, Probability and statistics, Fourier analysis that are taught in the undergraduate ECE course and their role in real-world applications were explained. Finally, the use of Machine learning and AI techniques were also briefly explained.

## 6. Opportunities in Civil Engineering

The Department of Civil Engineering organized an Alumni interaction through virtual mode on 27<sup>th</sup> March 2021.

Ms Bhavana D.R – MBA in Construction and Project Management, RICS, School of Built Environment, Mumbai, delivered the talk.



The sessions were on importance of the internship, how to apply for an internship, language communication skills, higher studies and career opportunities. Also shared key points in preparing for competitive examinations and opportunities available to become an entrepreneur.

# 7. A Future Lies in Your Hands

The Department of Information Science and Engineering organized a technical talk on 15<sup>th</sup> May 2021.

Mr. Govinda S, Full Stack Developer, M/S People in Touch, Netherlands delivered the talk.

The session, was on the importance of applying to Foreign Universities. The impact of Product companies and Service companies on individual career was explained thoroughly. The advantages and disadvantages of applying to different foreign Universities was briefed.



The next thing that was discussed in the talk was how to prepare for placements. Focus on the small open sources projects and develop the solutions and also speaker told the importance of creating an account in LinkedIn which helps them in the profile building. He also mentioned about working on GitHub and keeping all the code worked on for small projects. With respect to this he asked the students to choose different options like higher studies, Product based company

or Services based company.

# 8. Reinventing Business with IoT

The Department of Computer Science and Engineering, organized a webinar on "Reinventing Business with IoT" under Alumni Initiative on 15<sup>th</sup> May 2021.

Mr. Akshat Swarup, Senior Engineer- R&D, M/s Mercedes Benz, India



Mr Akshat Swarup highlighted on the following topics during his session.

Different IoT applications and its features, How to improve customer experiences by facilitating the support team with improved tools for monitoring faced by clients, Use of NLP in chatbot, Features, technologies of Mercedes Benz Me connect - a Completely IoT enabled car, How to improve effective business strategies in Business, E.g.: Smart fans, smart light, Business strategy and IoT technologies used by Amazon to improve its shipping capacity Different Use cases - IoT smart transportation, Medical Imaging, Smart cities and Retail (Amazon Go : Completely automated store).

# 9. Need for System Verilog, Verification Tools, Trends and opportunities in Industry

The Department of Electronics and Communication Engineering organized a webinar on Need for System Verilog, Verification Tools, Trends and opportunities in Industry on 15<sup>th</sup> May 2021.

Mr. Aditya Rangan C K, Senior Engineer-I, Open-Silicon Research Pvt. Ltd. (Sifive), Bengaluru delivered the talk.



Verification is the process of checking the correctness of design functionality. Functionality checking, Reusability, increasing the confidence/conviction, adding value to design are some of the factors which necessitates verification. Importance of verification and types of verification viz., front end and back end were discussed. Also, various verification methods such as Test Bench --Scenarios and TestCases, Assertions Based and

Functional and Code Coverage were explained in detail.

# 10. Create Competent Human Resource

 The Department of MBA & Research Centre organized an invited talk on College to Corporate Journey, 27 Feb 2021. Mr. Pradeep P, Senior Analyst, Smart Stream Technologies, delivered the talk.

# 11. Career Orientation – Start-up Success & Failure Models

The Department of Mechanical Engineering organized an Alumni interaction session on "Career Orientation – Start-up Success & Failure Models" on 19 May 2021.



Mr. Ullas L M., Senior Executive - Spare parts Inventory & Logistics at Phillips Machine Tools India Pvt. Ltd., Bengaluru, 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.

# 12. "SAMEEP -- Student and Ministry of External Affairs Engagement Programme"

The Department of IEM, organized webinar on **"SAMEEP -- Student and Ministry of External Affairs Engagement Programme"** for the students of JSSATE, Bengaluru.



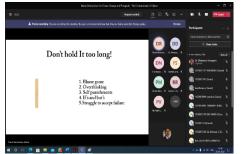
Mr. Harsh Chirania, Indian Foreign Service Officer and Second Secretary at Ministry of External Affairs.

# 13. Ice cream, Orange and Pineapple – The Fundamentals of Failure

The Department of Mechanical Engineering, organized webinar on "Ice cream, Orange and Pineapple – The Fundamentals of Failure".

Mr. Dinesh Raveendran, Technical Support Engineer - Strategic Procurement (SLP - Supplier Lifecycle and Performance) at M/s. SAP Ariba.

Mr. Dinesh narrated the reasons for failure in the student life with an analogy to having an ice cream,



life, he opined.

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

## **15. Cloud Platforms**

The Department of Information Science and Engineering, organised one day Seminar on "Cloud Platforms" on 29<sup>th</sup> May 2021.

Mr. Sachin Biradar, Engineer, M/s. Fossil Group, Bengaluru delivered the talk.

The program focused on Google cloud Platform. The main objective of the program was to make students understand the basic concept of Cloud Computing and available Cloud platforms in market.

## 16. "Let's Connect"

The Department of Computer Science and Engineering, organized webinar on "Let's connect" on 29<sup>th</sup> May 2021.

The sessions were on Importance of Resume and how to prepare it, what are the highlights to me made



in resume, How to face interviews, Physical appearance in interviews, Importance of higher studies and how to prepare for GRE etc. and when to apply, Focus on important course subjects and how to prepare for interviews, Importance of taking certification course and Internships, Participating in extracurricular activities, Sharing their experience during interviews, college time, and also during recruitment.

# 17. "Creativity - Breaking the Mould"

The Department of IEM, organized webinar on "Creativity - Breaking the Mould" on 2<sup>nd</sup> June 2021 for the students of JSSATE, Bengaluru.

Mr. Siddharth Chaitanya, Content Strategist Consultant at Unbox Experience. Around 65 students attended the webinar.

# 18. The future of Instrumentation & Electronics in the world of applied AI and cloud

The Department of EIE organised a technical talk on 09th June 2021 for the students of IV, VI, VIII



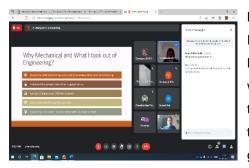
semester. The objective of this seminar was to enlighten students about the various career opportunities after completion of the degree. The speaker discussed the different career avenues available in India and abroad. He also presented the rigorous selection criteria involved in pursuing these career avenues. Students have understood the application of AI & IOT in Industrial automation

Mr. Abilash Manu, Innovation leader, Accenture Bengaluru delivered the talk.

# 19. Experience and Knowledge Sharing

The Department of Mechanical Engineering organised an Alumni interaction on Experience and knowledge sharing on 09.06.2021

Mr. H S Manjunath (2015 graduated), Project Delivery Experts, M/s. Tracey Brunstrom & Hammond Pvt. Ltd., Melbourne, Australia.



Mr. Manjunath 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.

## 20. Robotic Process Automation

The Department of Computer Science and Engineering, JSSATEB organized a webinar on "Robotic Process Automation "under Alumni Initiative on 12 June 2021.

Mr. Kapil Raina, RPA advisor, M/s. Squareone Technologies



Mr Kapil Raina highlighted on Introduction to Robotic Process Automation, Scope of RPA in IT Industry, Scope for RPA developers, Benefits of RPA and some use cases, Industries where RPA is applicable, Demo of web-based application using bot.