TRIBUTE TO

Late Shree S Narasaraju Garu, FOUNDER CHAIRMAN, The Oxford Educational Institutions

Sri S. Narasa Raju was instrumental in the formation of the Children's Education Society® which was registered on 30-9-1974. He had setup The Oxford Kannada Nursery School and The Oxford English Nursery School initially in 1974. In the natural growth by gaining momentum schools affiliated to CBSE/ICSE and other multifarious educational institutions were started functioning and thus catered the educational needs of entire JP Nagar and within its environs. Later on, Polytechnic, PU College, College of Sciences, Business Management, Law, Education, Hotel Management, Nursing, Pharmacy, Physiotherapy, Dental, Engineering and Medical Colleges in multiple academic streams were started in diversified areas in different campuses. Currently, 36 institutions under the umbrella of Children's Education Society® are functioning which is attributable to his relentless endeavor and commitment for imparting quality education.

CHAIRMAN'S MESSAGE

Sri. S N V L Narasimha Raju
Chairman

It gives me immense pleasure to congratulate the editorial team to bring out the College Newsletter SANDESH 2022. I hope this edition of the newsletter, now in your hands, will definitely stand as a true testimony to the complete record of all the academic, curricular, co-curricular and extra-curricular activities and events that were conducted in The Oxford College of Engineering during the academic year 2021-22. I believe that The Oxford College of Engineering would reach the pinnacle of excellence with the trust and cooperation of the parents and the students. All the very best to one and all.

PRINCIPAL'S MESSAGE

Dr. N Kannan
Principal

It's my pleasure to extend a warm welcome to you all for this edition of College Newsletter SANDESH 2022. As the Principal of The Oxford College of Engineering, I feel honoured and privileged to be a part of an educational institution where every stakeholder is a learner and every day is an opportunity to learn and discover. We look at ourselves as a community of learners, where everyone learns including our teachers, parents and staff. We are a place of learning, belonging, growth and support for students, families and the community. Thank you for being a part of our community and college! Let us know how we can help make your TOCE experience even better.

FROM THE EDITOR'S DESK

Dr. B K Manjunath
Convener

'SANDESH 2022' is the Newsletter of TOCE, envisioned under the able leadership of our chairman and principal. It is for embossing accomplishments of TOCE, its staff¬ and students, and disseminate such acquaintance to the diverse stakeholders. This newsletter will cater to magnify awareness, interaction and unification of various stakeholders. The progression of any organization relies upon the individuals, who are operating at the back of the visuals and round-the-clock mapping things to the succinct and will endeavor to acknowledge such e¬fforts and their end results. A wide endorsement is requisite through the reader's valuable suggestions and reviews for this mission. Happy Reading.

IN THIS ISSUE…

ABOUT THE INSTITUTION

The Oxford College of Engineering revolutionizes since its inception for the development of technical skills and managerial aptitude through innovative and modern teaching methods and values by adopting the latest technology converged over a period of time. It is conducive to the students to become the dynamic leaders of the future. Emphasis has been laid on the conceptual and analytical genesis of teaching and learning methodology.

The college is proud to be re-accredited by NBA for the 3 departments - Electronics and Communication Engineering, Biotechnology and Mechatronics Engineering till June 2025. The department of Computer Science and Engineering and Information Science and Engineering has submitted the SAR and are expecting for the departmental NBA visit. The Institution has submitted NAAC- SSR, and are waiting for the NAAC visit. The Oxford College of Engineering is ISO 9001:2015 certified institution. Our college is ranked 66 across India in Green Institutional Ranking 2022 and is also recognized as 'Green Campus' by IIWM under AICTE Green Campus Programme. TOCE participated for NIRF, ARIIA every year. Our college is also recognized by AICTE-CII Survey and obtained gold and silver ranking. To add more laurels to our college, we have been ranked and rated by various National Magazines, namely ELETS Digital Learning Magazine, Dataquest, Times of India Survey, The Week, The Outlook, India Today and by Careers360.

The college success rate of UG Final Year 2021 passed out batch is 83.25% and PG Final Year 2021 passed out batch for MBA is 90% and MCA is 98%. Our students grabbed 13 university ranks in both UG and PG categories during 2020-21. The overall result of 20-21 batch is 97%. The Oxford College of Engineering celebrated its 17th Graduation Day on Saturday, 23rd April 2022 in its campus and Dr. K. Balaveera Reddy, Former Vice Chancellor, VTU, Belagavi, was the Chief Guest.

460 students have got placed in reputed companies including Axial Steel Detailing Pvt. Ltd., Accenture, Amazon, Aparna Constructions, Artech Infosystems, Befree Business Resourcing LLP, BIOCON, BOSCH, BYJU's Cognizant Technologies, Concentric, CSGI, etc. For 2020-21, batch highest package (Brillio) was 8.5 LPA and the average package was 4 LPA and for 2021-22, batch highest package (PhonePe) is 22 LPA and the average package is 5 LPA. 'Offer Letter Distribution Ceremony was held on 08-07-2022, Dr. Binoy Mathew, Director, VTU, CPC was the Chief Guest of the occasion.

The Institution identifies meritorious students of various categories and provides financial support in the form of Scholarships. Extracurricular activities and cultural fests serve as very good platforms for cultural exchange, several cultural and sports activities are regularly conducted. Ethnic Week was celebrated from 27th June 2022 to 2nd July 2022. On 29th June 2022, all students and staff came in ethnic wear, wearing the traditional clothes together gives a feel of patriotism as well as connectivity in culture.

The Sixth National Conference on Science Engineering and Management – NCSEM 2K22 was held at The Oxford College of Engineering, Bangalore on 1st and 2nd July 2022. The program was presided by Shri P Narendra Kumar, Director, Product Development, Siemens, Bengaluru. Papers were presented by faculty and students from various colleges. Project Expo by our students was also displayed during the conference.

To provide techno-platform, the Institute has an exclusive research committee, Institute Innovation Council and Committee for Developing Collaboration, MOUs & Linkages. The Institute has research centers with 22 research supervisors recognized by the university who are currently guiding 59 research scholars for Ph.D. program and 28 candidates were offered doctoral degrees. The research-based learning is destined to learn more and better than regular academics and encourages faculty and students for active research. There are 96 publications in reputed journals and 19 patents have been filed during the tenure of this newsletter. Faculties i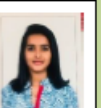n the institute are actively engaged in contributing their expertise to the development of sustainable research-based solutions for societal causes, the ideas of the faculties were well appreciated by various funding organizations and they extended financial assistance to execute their innovative ideas. Institute has received a total of Rs.3.35 crore still date from various funding agencies like NRB, DRDO, BIRAC, BRNS, AICTE, VTU, KSCST, VGST, NIF, etc. Intellectual property has become a highly desirable asset, institute gives high priority to the protection of intellectual property and established IPR cell with mentoring from KSCST, VTPC, NRDC and MHRD. Also, institute has developed 8 products of high societal significance.

Encouragement is given for research, consultancy services, extension activities, learning resource and students' support. The institutional vision has been achieved through multiple strategy development and academic strength in the congenital academic environment.

VTU Rank Holders of 2020-21

"ISO Certification"

"ARIIA Certification"

Signing MOU between TOCE & NASSCOM for undertaking
Skill Development Training in Emerging Technologies

"Covid-19 Vaccination Drive" on 3rd July 2021 at The Oxford College of Engineering."
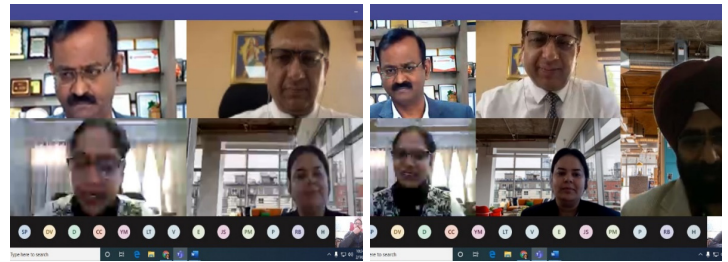
A five-day FDP on "Enabling the Faculty on IR 4.0 Technology - Artificial Intelligence"
Collaboration with TECH SAKSHAM, Microsoft, edu-net Foundation and SAP was
organized from 14th to 18th February 2022.

The Oxford College of Engineering organized an SAP workshop and Hands-on
training on 23rd May 2022 in association with the Transformation Express of SAP.
The Oxford College of Engineering was the first milestone for the
'Transformation Express' in Bengaluru.

PROJCT EXPO 2K22

"Project Expo 2022"

NCSEM-2K22

The Sixth National Conference on Science Engineering and Management – NCSEM 2K22 held at The Oxford College of Engineering, Bangalore on 1st and 2nd July 2022

Induction Programme for B.E. and B.Arch - 1st Year

TOCE organized a one-week Induction Program for the fresh entrants to the B.E. and B. Arch 1st Year - 2021-22 batch students from 20th to 24th December 2021. The continuation of the SIP was taken care of in online mode in two different parts on alternate Saturdays till 5th March 2022. The induction program for newly admitted students was conducted offline with the AICTE Induction program policy. The objective of this SIP was to acclimatize the students to the new environment and get them acquainted with the institution's culture. "Rani Chennamma Pade" – A team of 17 Trained Women Cops visited the campus to create awareness about the crimes against women & children and self-defense.
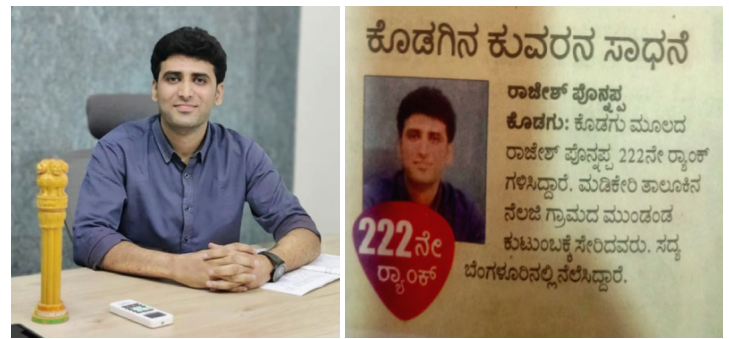
We are proud to inform that our Alumni of the Department of Mechanical Engineering bagged 222 Rank in UPSC 2021 and he is also the 10th VTU Rank Holder
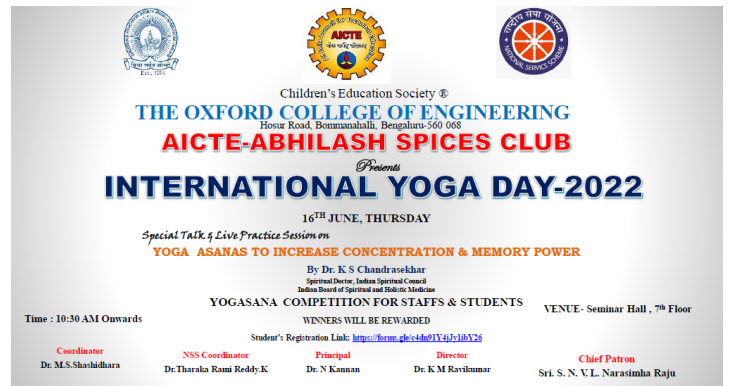
"International Yoga Day 2022"

"Celebration of World Environment Day"

"Glimpses of Techno Hackathon 2022"

VTU Education Conclave - 2022

VTU Education Conclave - 2022

The First Pan Karnataka Conclave for Engineering Aspirants and Parents was held on 31st July & 1st August 2022 at Gayathri Vihar, Palace Ground, Bengaluru, where our student's bagged 1st and 3rd Prizes in the VTU Education Conclave 2022 – State Level Students Project Exhibition & Competition.

Teacher's Day and Engineer's Day Celebration

Teacher's Day and Engineer's Day were celebrated on 16th September 2021, at The Oxford College of Engineering campus. All faculties took part in different games and made the day a memorable one.

"Teacher's Day and Engineer's Day Celebration"
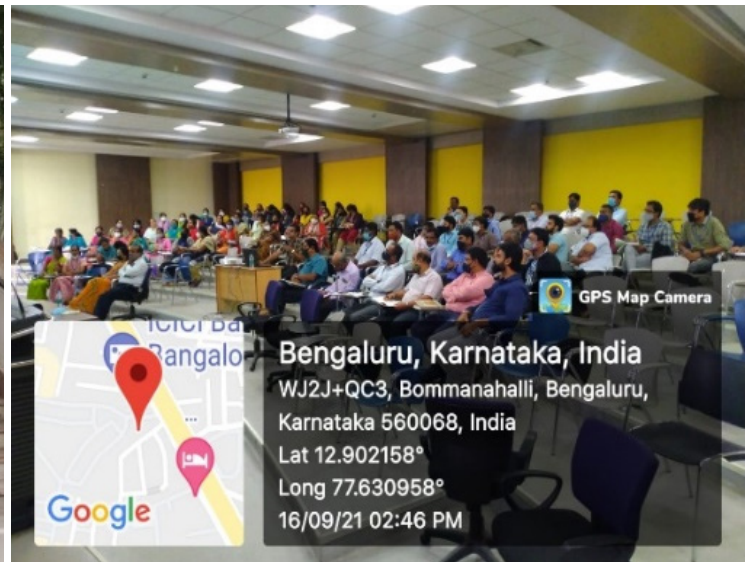
Kannada Rajyotsava Celebration

Kannada Rajyotsava was celebrated in The Oxford College of Engineering, Bengaluru on 11th November 2021.

A Glance of Kannada Rajyotsava

Women's Day Celebration

To honor womanhood, The Oxford College of Engineering has celebrated International Women's Day on Tuesday, 8th March 2022, in the college campus.
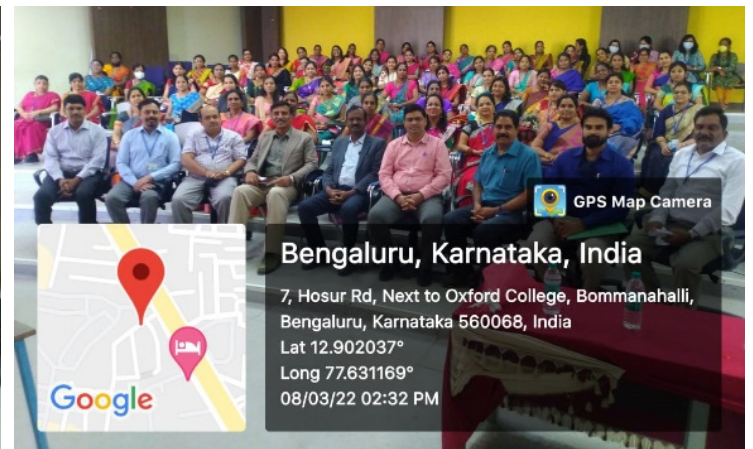
A sight of Women's Day Celebration

Graduation Day

The Oxford College of Engineering celebrated its 17th Graduation Day on Saturday, 23rd April 2022, in its campus.

"Glimpses of Graduation Day"

List of students enrolled for B.E. Honours

Sl. No.	Name of the student	USN	Sl. No	Name of the student	USN
1	Arkesh V Kumar	1OX19CS011	29	Divya G	1OX19EC017
2	Bandakshari U	1OX19CS018	30	Divyashree C	1OX19EC018
3	Basharat Khursheed	1OX19CS019	31	Impana S V	1OX19EC026
4	Bhoomika R	1OX19CS020	32	Revathi S	1OX19EC062
5	Chitra B	1OX19CS024	33	Rakesh B R	1OX19EC061
6	Keerthana S	1OX19CS042	34	Sneha S	1OX19EC077
7	Komal Sharma	1OX19CS045	35	Namraj Joshi	1OX19EC048
8	K.P.Preksha Suja	1OX19CS046	36	Arunachalam M	1OX19EC006
9	Md. Siddiq Baig	1OX19CS052	37	Sindhu S	10X19EC076
10	Mohit Sharma	1OX19CS056	38	Preetam Ambudkar	10X19EC057
11	Monisha Priya S	1OX19CS057	39	Chethan V R	1OX19EE005
12	Mudagandur Manoj	1OX19CS058	40	Shivani H	1OX19EE031
13	Sarvesh P	10X19CS092	41	Vinay C	1OX19EE039
14	Suhas K	10X19CS103	42	Eeksha Prasad	1OX19BT007
15	Rahul Rajesh	1OX18CS059	43	Harika R	1OX19BT009
16	Aishwarya P	1OX19IS004	44	Inchara Ks	1OX19BT013
17	Amisha Kumari	1OX19IS012	45	Mythili S T	1OX19BT020
18	Chandana V	1OX19IS021	46	Poojitha Ng	1OX19BT022
19	Chinchu Sunil	1OX19IS022	47	Sneha G Krishnan	1OX19BT026
20	Manasa M	1OX19IS049	48	V.V.Krishna	1OX19BT027
21	Pavan Kapoor	1OX19IS070	49	Purnashree M	1OX19CV023
22	Roopashri.C.M	1OX19IS082	50	Lavanya C	1OX19CV016
23	Samipya K	1OX19IS088	51	Adithya K	1OX19MT002
24	Nithin R	1OX19IS066	52	Arjun Saiju	1OX19MT005
25	Syeda Noor Zaineb	1OX19IS104	53	Dennies Bensen	1OX19MT008
26	Sonali Gupta	1OX19IS112	54	S Eshwara Varun	1OX19MT015
27	Hema M	1OX19EC024	55	Somesh S Ghatage	1OX19MT021
28	M Pragathi	1OX19EC037	56	Giridhar P M	1OX20MT403

DEPARTMENT OF CORPORATE RELATIONS

VISION

Department of Corporate Relations of TOEI strives towards making graduates competent with domain and professional skills, that they can be employable ready from the very beginning. Our vision is to will guide students to meet their career aspirations and to meet the industry expectations.

MISSION

- To collaborate with companies to understand business and technology needs, trends, and career opportunities.
- To enhance the employability skills of every student by conducting various Training, multiple certifications, Projects, Internships, Technical Talks, Workshops, Hackathons, GDs, Resume Writing, Facing Interview and many more.
- To ensure students are fully equipped to kick start their journey towards tremendous career.

ABOUT THE DEPARTMENT

The Department of Corporate Relations at The Oxford College of Engineering is headed by Prof. Bheemeswara Reddy V who believes discipline in young minds is the secret of success. His dedication and focus drives students to steer towards growth and contentment. He, having thirst to enrich students with all necessary attributes that would take them to success, strategizes and executes plans in such a way that students become self-mentors. Having wide experience in Teaching and Corporate, he believes that a student must understand the changing requirements of the Employer and be triggered and prepared accordingly. It is the vital responsibility of the Department to ensure that the students are mentored according to the requirements of Corporate.

The Department has associated with multiple Industries and best Training organizations to impart skills and enhance competencies among students. The Department guides students to strengthen their Interpersonal and Intrapersonal Skills which in turn helps them to be Employable ready. The Oxford College of Engineering is one of the pioneers in Training and Coaching on company specific requirements. Students' success is our fulfilment and hence that is our motto. The students are well informed about the need for maintaining good academic scores and are tracked regularly on the same to have high performance.

HIGHLIGHTS OF THE DEPARTMENT

- The Department of Corporate Relations focuses on the Upskilling the students to make them face the challenging roles in the corporate field.
- Vigorous training on Aptitude and Recruitment Essentials, Soft Skills, Personality Development are being imparted in regular intervals through the Year.
- The Department focuses on enhancing Technical Skills among students.
- Exclusive Company Specific Training is rendered to students followed by Intensive Assessments.
- Highest CTC offered in 2021-2022 is 22 LPA.
- Average CTC is 5 LPA

CHILDREN'S EDUCATION SOCIETY (Regd.)
THE OXFORD COLLEGE OF ENGINEERING
Department of Corporate Relations

Placements 2022

- Regular offers up to 5LPA 481 students
- Dream Offers 5LPA-10 LPA 53 Students
- Super Dream Offer 10 LPA & Above 3 students
- Average CTC 5 LPA
- Second Highest CTC 10.8
- Highest CTC 22 LPA

5 LPA OFFERED COMPANIES

PhonePe · vmware · XORIANT · TIGER ANALYTICS · Kaar
Cognizant · CitiusTech · IMPETUS · ALSHAYA GROUP
publicis sapient · BYJU'S The Learning App · happiest minds · KreditBee

Companies Visited During 2021-2022

Placement Record 2021-22

- 200+ Recruiting Partners
- 550+ Offer Letters
- Highest Package 22 LPA
- Average Package 5 LPA
- 81% Students Placed

Placement Record

Tech-Talk by Mr. Yash, HR from HP.INC

CHILDREN'S EDUCATION SOCIETY (Regd.)
THE OXFORD COLLEGE OF ENGINEERING
Recognized by the govt. of Karnataka, Affiliated to Visvesvaraya technological university, Belagavi
Approved by AICTE New Delhi, Accredited by NBA
Bommanahalli, Hosur road, Bangalore - 560068
Department of Corporate Relations

CAMPUS PLACEMENT RECORD: 2021-22

1st Highest Package	2nd Highest Package	3rd Highest Package	Average Package
22 LPA	10.8 LPA	8.5 LPA	5 LPA

PhonePe	1	KreditBee	1
vmware	2	brillio	12
tcs TATA CONSULTANCY SERVICES	41	kyndryl	10
accenture	10	Capgemini	15
Atos	23	CitiusTech	7
HCL	20	epi EPISOURCE	19
Cognizant	48	indiamart	5
amazon	17	HEXAWARE	12
BRISTLECONE	4	HDFC Life	6

550+ Offer Letters
50+ In-Pipe Line
220+ Companies Visited
10+ In-Pipeline

NOBROKER	11	SANKALP	8	BYJU'S	5
wipro	43	happiest minds	4		
QUESS	5	indegene	2	GENERAL ATOMIC AERONAUTICAL	1
Kaar	3	Tech Mahindra	9		
SONATA SOFTWARE	20	IBM	2	SPECTRAFORCE	10
ALSHAYA GROUP	1	ZIFO RnD SOLUTIONS	1		
VisioNet	13	IMPETUS	3	V2SOFT	1
hp	2	BIZVIZ	2		
Xoriant	7	CSB Bank	6	TERRALOGIC	7
	2	publicis sapient	3		
ZenSar	6	Infosys	17	Global Knowledge	2
TATA AIG	1	RENDERED IDEAS	1		
6d Technologies	5	Datamites	4	Biocon	9
infinite	3	ITC INFOTECH	2		
TIGER ANALYTICS	1	IntelliPaat	3	zyoin	3
	3	Xmplar	3		

Aptitude and soft-skills Training to the pre-final year Students

Various Campus Drives for 2021-22 Batch

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VISION

To establish the department as a renowned center of excellence in the area of scientific education, research with industrial guidance and exploration of the latest advances in the rapidly changing field of computer science.

MISSION

- **M1** - To produces best Computer Science Professionals with intellectual skills.
- **M2** - To provide a vibrant Ambience that promotes Creativity, Technology Competent and Innovation for the new Era.
- **M3** - To Pursue Professional Excellence with Ethical and Moral Values to sustain in the highly demanding world.

ABOUT THE DEPARTMENT

The department of Computer Science and Engineering was started in the year 2000 with an intake of 60. At present, the intake is 180 for the four years Under Graduate Program B.E (CSE). The department has two-year M. Tech (CSE) program. The department also has a VTU recognized R&D center. The UG programme of the department was accredited by NBA in the year 2007 for 3 years and it was re-accredited in the year 2016 for 3 years and renewed in 2018 for 3 years (2018-2021). Now the Department is expecting peer team visit for fresh accreditation.

The department has highly qualified teaching faculty members with various specializations in Computer Science and Engineering to provide value-based training and skills needed for the students to cater the need of the software industry. The department aims to provide a habitat that helps students to pursue higher studies in the universities of high repute and to find careers in cutting-edge companies. The Department has well equipped state-of-the-art infrastructure facilities to carryout various real time projects, research and consultancy activities in recent technologies. The Department has undertaken many research and consultancy projects funded by multinationals and government agencies. The department has good number of research publications in various reputed journals and patents.

The Department has an excellent placement track record in various multinational companies, offers with high salary packages.

HOD'S PROFILE

Dr R. Ch. A. Naidu obtained his PhD Degree from Andhra University, Visakhapatnam, India in 2015. He is a Professor and HOD of Department of Computer Science & Engineering from July 2019 to till date. He is the Institute coordinator for NBA & IQAC. He is the Reviewer of Journal of Network and Computer Applications. (Elsevier Journal), International Journal of Network Security (Scopus Indexed Journal). He is the Life Member, Indian Society for Technical Education (ISTE), India, and IEEE Senior member. He filed 3 Indian Patents and total 192 papers in International Journals and International Conferences to his credit. His domain areas are Information Security, Big Data Analytics, Medical Imaging and IOT.W

ACADEMIC ACHIEVEMENTS
Topper Achievements

Mohit Sharma (1OX19CS056) of the 5th semester has secured 99/100 in Automata Theory and Computability subject in VTU exams held in March 2022.

2018-2022 Toppers

Sivakama Sundari
CGPA: 9.32

Noor Misbah
CGPA: 9.26

Namratha
CGPA: 9.3

Ruzaina khanum
CGPA: 9.26

Result Analysis 2017-2021 batch result
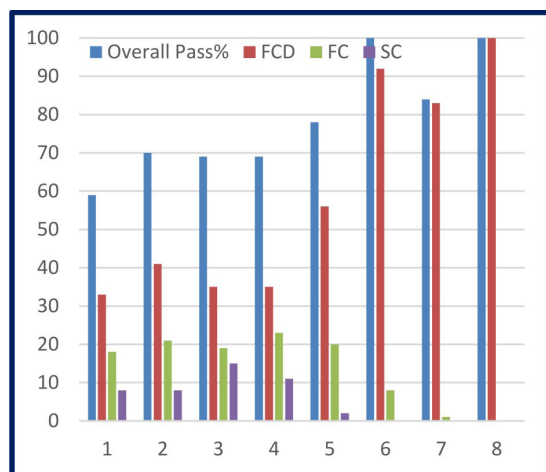
Success rate of 2017-2021 batches is 82.72%.

Result Analysis 2018-2022 batch result
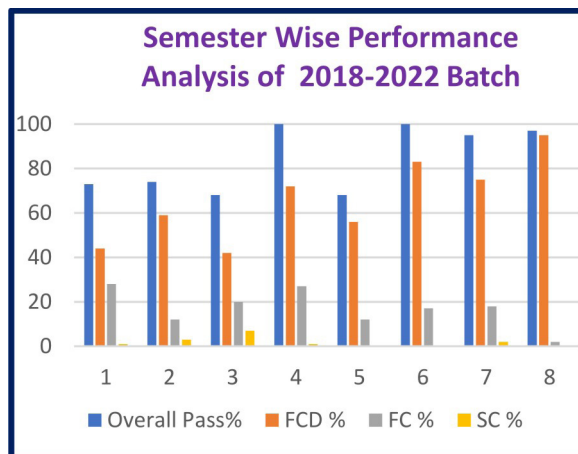
Sem	Students Appeared	Overall Pass%	FCD	FC	SC
1	112	59	33	18	8
2	107	70	41	21	8
3	109	69	35	19	15
4	110	69	35	23	11
5	97	78	56	20	2
6	97	100	92	8	0
7	96	84	83	1	0
8	96	100	100	0	0

Sem	Students Appeared	Overall Pass%	FCD %	FC %	SC %
1	93	73	44	28	1
2	90	74	59	12	3
3	101	68	42	20	7
4	101	100	72	27	1
5	101	68	56	12	0
6	101	100	83	17	0
7	106	95	75	18	2
8	107	97	95	2	0

List of students pursuing higher studies from 2017-2021 batches

Sl.No.	USN	Name	Higher Studies Details
1	1OX17CS092	Shivangi Arul	Master of Applied Computer Science, Concordia University, Canada
2	1OX17CS036	K.N. Nikhith	MS in Data Science, Wichita State University, US.
3	1OX17CS001	Abhinandan M	Paderborn University, Germany
4	1OX17CS005	Amit Ajadhav	MS in Data Science, FriedRich -Alexander University Erlangen-Nurnberg, Germany

Guest lecturers Organized

Sl. No	Date	Title of Guest Lecturers	Resource Person
1.	27-07- 2022	Interdisciplinary Research at AMC College of Engineering	Dr. Madhu Mohan. R
2.	18-07-2022	R and D IoT of the future	Dr. Roopa M S
3.	23-05-2022	Connectivity between SAP and Cloud	Mr. Praveen Rao
4.	29-04-2022	Open-Source Projects	Mr. Naveen Mudunur
5.	26-04-2022	R & D and Innovation on Wildlife Conservation	Ms. Anisha Iyer
6.	21-02-2022	Intellectual Property rights and its protection in India	Mr. Abhishek Singh
7.	31-12-2021	Leadership and Time Management	Mrs. V Lakshmi Suneetha
8.	24-12-2021	Hands Session on coding	Ms. Muskan
9.	16-12-2021	Life Mastery-happiness, health and success	Ms. Kushmitha
10.	12-12-2021	Workshop on Design Thinking, Critical thinking and Innovation Design	Mr. Kiran Nayak
11.	10-12-2021	Installation of Linux Distribution	Mr. Naveen Mudunur
12.	4-12-2021	Free Software Movement – Karnataka (FSMK)	Mr. Naveen Mudunur
13.	18-10-2021	My Story - Motivational Session by successful innovators	Mr. Pujari Sreerama
14.	01-10-2020	Entrepreneurship and Innovation as Awareness on Effective Placements	Mr. Nag veer V

INDUSTRIAL VISIT

Industrial visit to Centre for ETHNUS at Jayanagar

The Oxford college of Engineering, Bangalore- in association with Department of Computer Science and Engineering a batch of 6th semester students with faculty Ms. Shruthi K Reddy and Ms. Lenish Pramiee visited ETHNUS at Jayanagar in Bangalore. This visit was mainly focused on presentation on Emerging Technology to understand the Amazon Web Service.

Industrial visit to Centre for Microsoft Research office
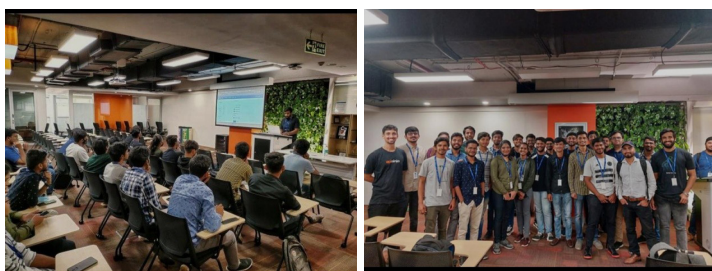
The Department of CSE in association with IEEE arranged a visit to "**Microsoft Research office"** for the Kong Bangalore Meet up on 18th June 2022. Third year students of CSE actively participated in this meet up to enrich their knowledge in API gateway.

Outreach programs organized

Sl.No.	Date	Activity
1	07-05-2022	Menstruation break the Taboo
2	14-11-2021	Menstrual Awareness for Men
3	07-11-2021	Pollution Awareness program
4	26-11-2021	Paper On enabling e-waste segregation and recycling through technology
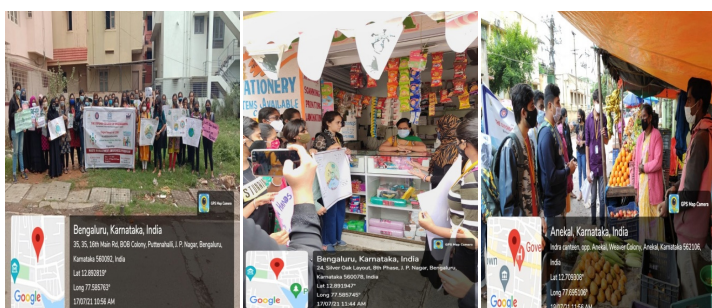
Glimpses of Outreach Activity

Memorandum of Understanding

Industry interaction for training/internship/placement

To strengthen interaction with industries and to keep our students updated with the latest trends in Computer Science & Engineering, the Department has entered into an agreement (MOU) with the following company.

Prinston Smart Engineers Vishnuvardhan Statue Rd, Vishwapriya Nagar, Begur, Bengaluru, Karnataka 560068 organized To Promote Workshops, Conferences, Seminars, Placement Opportunities & Internships [2021-24].

Funded student projects in the academic year 2021-2022

SL. No	Title of the Project	Student	Guide	Funding Agency
1	Smart Stick for the Trammels	Ashwini L Asma Sultana Bharath Reddy Margaret	Dr. E Saravana Kumar	KSCST
2	Supervision of water distribution Using IoT and Android	Abhishek C Banu Priya U Darshan P Pavan Kumar	Dr. M Nirmala	KSCST
3	Smart Wrist Pulse Oximeter	Sivakama Sundari K Vishal S Sindhe Salim Khan Satarupa Naskar	Dr. Smitha	KSCST
4	Night patrolling Robot	Sariga V R Vikash Chandra Mustafa A Mulla Kaushik M	Dr. P. Bindu Madhavi	KSCST
5	COCO-The Cool Robot	Ayesha Sumaiya Sumaiya Khanam Anureddy K V Manjunath K	Dr. Shobha	VTU

STUDENT ACHIEVEMENTS

Mustafa A Mulla (1OX18CS098) 8th Sem Student had participated in 45th Series KSCST Student Project Program Seminar and Project Exhibition held on 12th & 13th August 2022 at VTU, Belgaum, Karnataka and presented seminar

CHILDREN'S EDUCATION SOCIETY (Regd.)
THE OXFORD COLLEGE OF ENGINEERING
Department of Computer Science and Engineering
Hosur Road, Bommanahalli, Bengaluru-560 068
(Approved by AICTE, New Delhi, accredited by NBA, New Delhi & Affiliated to VTU, Belgaum)

Heartiest Congratulations!!!
For bagging placement offer at 8 Companies

Name: Meghana Venkatesh Shet
USN - 1OX18CS043

amazon
Atos
Capgemini
mPokket
CitiusTec
HCL TECHNOLOGIES
Alshaya
6D Technologies Smart *Ideas*, Delivered

VTU Education Conclave 2022

The project titled
"Supervision of Water Distribution Using Android and IoT" awarded with THIRD PRIZE and CASH amount of Rs. 30000. This project done by CSE students Abhishek C, Banu Priya U, Darshan P, and Gowducheruvu Pavan Kumar Reddy.

FACULTY ACHIEVEMENTS

Dr. Seema Patil	Dr. Shobha T
1OX14PEM02	1OX14PEM01

1. Prof. Seema Patil was awarded Doctor of Philosophy in the Faculty of Computer & Information sciences for the thesis entitled **"Nature Inspired Adaptive techniques using Hybrid Clustering for crime databases"** from Visvesvaraya Technological University on 10th March 2022.

2. Prof. Shobha T was awarded Doctor of Philosophy in the Faculty of Computer & Information sciences for the thesis entitled **"Soft Computing Based Paradigm for Land Use Land Cover Data"** from Visvesvaraya Technological University on 10th March 2022.

FDPS ORGANIZED

CSE Dept Faculty Development program was organized on 26th July 2021- 31st July 2021 in online mode; it mainly focuses on the recent advancement in Artificial Intelligence (AI) and Machine Learning (ML) in various fields such as Industry, research and development. The faculty, research scholars can take the benefits of the programs. The eminent speakers at our program are from IIM, NIT's, and IISC. The major topics covered in our program are Object Identification using Machine Learning, AI in computer vision, and the role of Machine Learning in Cyber Security.

FDP ATTENDED

1. Dr Shobha T attended National Level 2day virtual Lecture Workshop on "Diversified Applications of Machine Learning Algorithms", organized by Department of Computer Science and Engineering, BMS Institute of Technology and Management, Bengaluru and Indian Academy of Sciences, Bengaluru on 21st and 22nd Sept 2021.

2. Dr Shobha T attended 6day online FDP on "Advances in Artificial Intelligence and Machine Learning", organized by Department of Computer Science and Engineering in association with IEEE CS Chapter, TOCE, Bengaluru from 26th to 31st July 2021

3. Dr Seema Patil attended National Level 2day virtual Lecture Workshop on "Diversified Applications of Machine Learning Algorithms", organized by Department of Computer Science and Engineering, BMS Institute of Technology and Management, Bengaluru and Indian Academy of Sciences, Bengaluru on 21st and 22nd Sept 2021.

4. Dr Seema Patil one-week STTP on "Startup Driven Bio innovation and IOT for Sustainable Agritech", organized by Department of Biotechnology, TOCE, Bengaluru from 23rd to 28th August 2021.

5. J Jesy Janet Kumari attended workshop on Improving Research Writing using Grammarly by Central Library, Amrita Vishwa Vidya peetham, and Coimbatore on 28th April 2022

6. J Jesy Janet Kumari attended Aicte-Iste Sponsored Six Days Refresher Program On "Data Science & Block Chain" from 03.01.2022 to 08.01.2022 organized by CSMSS Chh. Shahu College of Engineering, Aurangabad, Maharashtra.

7. J Jesy Janet Kumari attended IP Awareness/Training program on February 21, 2022 Organized by Intellectual Property Office, India.

8. J Jesy Janet Kumari attended in one-week AICTE - ISTE Refresher Programmer on "Recent Advances in Material Design, Manufacturing, Characterization, Machining and Applications" Conducted by The Dept. of Automobile Engineering, TOCE, Bangalore 22-02-2022 TO 28-02-2022.

9. J Jesy Janet Kumari attended 5-day Online FDP on" Inculcating Universal Human Values in Technical   Education", organized by AICTE from 13 sep-17 sep 2021.

10. Rekha P participated 5 days FDP on "Student Induction on UHV "organized by AICTE during 11th April -15th April 2022.

11. Rekha P participated 5 days FDP on "Advancement in machine learning and Artificial Learning "organized by dept of ISE in June 2021.

12. Lenish Pramiee attended AICTE - ISTE Sponsored Six Days Refresher Program On "Data Science & Block Chain" from 03.01.2022 to 08.01.2022 organized by CSMSS Chh.Shahu College of Engineering, Aurangabad, Maharashtra.

13. Lenish Pramiee attended 6 days FDP on "Multi Technology "Organized by Brain vision solution India Pvt ltd and National Youth Council of India on 28th June 2021-3rd July 2021

ONLINE and NPTEL COURSES

1. Dr E Saravana Kumar Completed 28 days online Course on "How to Clear Patent Agent Examination" from 6th December 2021 to 12th January 2022, IPEVER - Chennai (Idea-Protection and Commercialization).

2. Dr Shobha T has Completed NPTEL 12-week Course on "The Joy of Computing using Python" in the duration Jan - April 2022 with 83% and Completed NPTEL 4-week Course on "Python for Data Science" in the duration Jul - Aug 2021.

3. Dr Seema Patil has Completed NPTEL 12-week Course on "The Joy of Computing using Python" in the duration Jan - April 2022 with 73% and Completed NPTEL 4-week Course on "Python for Data Science" in the duration Jul - Aug 2021

4. J Jesy Janet Kumari has Completed NPTEL 12-week Course on "Deep Learning" in the duration Jan - April 2022 with ELITE credits 3.

5. J Jesy Janet Kumari has course on Google Cloud Fundamentals: Core Infrastructure on 5th May 2022.

6. J Jesy Janet Kumari has Coursera course on Essential Google Cloud Infrastructure: Foundation on 18th May 2022.

7. J Jesy Janet Kumari has Completed Coursera course on Elastic Google Cloud Infrastructure: Scaling and Automation on 18th June 2022.

8. J Jesy Janet Kumari has Completed Coursera course on Reliable Google Cloud Infrastructure: Design and Process on 1st July 2022.

9. Rekha P has completed course on "Data mining and machine learning" on June 26, 2021.

10. Rekha P has completed NPTEL 12-week Course on "Data Science for Engineers" in the duration July 2021.

11. Rekha P has Completed NPTEL 12-week Course on "Introduction to IoT" in the duration Oct- Feb 2022.

12. Completed NPTEL 12-week Course on "Deep Learning" in the duration Jan - April 2022 with ELITE credits 3.

PAPERS PRESENTED

1. R Ch A Naidu, "An exploration of heart disease prediction algorithms using machine learning techniques" 6th International Conference on Awareness in Computer & Communication Engineering (ACCE - 2022), held on 08.08.2022 at Vemana Institute of Technology – Bengaluru.

2. R Ch A Naidu," An art of review in predicting the rose plant diseases using image processing with machine learning" ,6th International Conference on Awareness in Computer & Communication Engineering (ACCE - 2022), held on 12.08.2022 at Vemana Institute of Technology – Bengaluru.

3. J Jesy Janet Kumari presented a paper entitled presented a paper entitled," Automatic Autonomous Heart Monitoring Device using Machine Learning for COVID Patients" International Virtual Conference on Machine Learning Applications in Applied Sciences and Mathematics, IVCMASM 2022 Organized by the Department of Artificial Intelligence and Data Science, Easwari Engineering College (Autonomous), Chennai on 30th - 31st March 2022.

RECOGNITIONS

1. Dr E Saravana Kumar recognized Board of Studies External member in the Department of Animation and Virtual Reality, School of Computer science, JAIN (Deemed to be University) on the 25th April 2021.

2. Dr E Saravana Kumar recognized Session chair and reviewer in International Conference on Emerging Trends in Engineering, Management & Technology (ICETEMT-2022) Organized by Rajarajeswari College of Engineering - Bangalore on 21st June 2022.

3. Dr E Saravana Kumar was Reviewer in the IEEE International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE-2022), organized by the Bellary Institute of Technology and Management, Bellary, India in association with IEEE Bangalore Section and IEEE Information Society on 23rd-24th April, 2022.

4. Dr E Saravana Kumar has recognized as an Editorial Board Member in International Journal of Intellectual advancements and research in engineering computations, on 14th Feb 2022.

5. Dr E Saravana Kumar recognized Session chair and reviewer in International Conference on Emerging Trends in Engineering, Management & Technology (ICETEMT-2022) Organized by Rajarajeswari College of Engineering - Bangalore on 21st June 2022

6. Dr E Saravana Kumar has recognized as an Editorial Board Member in International Journal of Intellectual advancements and research in engineering computations, on 14th Feb 2022

7. Dr E Saravana Kumar was Reviewer in the IEEE International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE-2022), organized by the Bellary Institute of Technology and Management, Bellary, India in association with IEEE Bangalore Section and IEEE Information Society on 23rd-24th April, 2022.

8. Dr E Saravana Kumar has recognized as an Editorial Board Member in International Journal of Intellectual advancements and research in engineering computations, on 14th Feb 2022

9. R Raghu Editorial Member in Reputed SCI journal" Digital Manufacturing Technology".

10. R Raghu Guided Project Title "Supervision of Water Distribution Using Android and IoT" got KSCST fund (Rs.4000).

11. R Raghu Guided Project Title "Supervision of Water Distribution Using Android and Iot" got Third Prize (Rs.30000) in VTU Education Conclave 2022 held on 31st and July and Aug 1st.

12. R Raghu Active Reviewer in Springer Journal (SCI and SCIE) "Journal of Ambient Intelligence & Humanized Computing (AIHC)".

13. R Raghu Active Reviewer in Springer Journal (SCI and SCIE) "Frontiers Digital Health".

14. R Raghu Active Reviewer in Springer Journal (SCI and SCIE)"Wireless Personal Communications".

15. R Raghu Active Reviewer in Springer Journal (SCI and SCIE)"Journal of Advances in Information Technology".

16. Dr E Saravana Kumar received Certificate of Appreciation as a Reviewer for Springer CCIS Series Conference Proceedings of the "3rd International Conference on Computing Science, Communication and Security (COMS2-2022)" organized by the Ganpat University, Gujarat, INDIA on 6th- 7th February 2022.

17. R Raghu received Certificate of Appreciation as a Reviewer from" WILEY" SCI and SCIE Q1 journal "Concurrency and Computation: Practice and Experience".

18. R Raghu received Certificate of Appreciation as a Reviewer from" WILEY" SCI and SCIE Q1 journal "Concurrency and Computation: Practice and Experience".

BOOK PUBLICATIONS

E Saravana Kumar Published a book entitled, "Problem Solving Techniques Using Python" by Amazon Kindle Edition on 2 March 2022, ASIN: B09TSQ5KFH

RESEARCH AND DEVELOPMENT

Papers Published in Conference and Journals

1. E Saravana Kumar, "An improved watermarking algorithm for robustness and imperceptibility of data protection in the perception layer of internet of things" Pattern Recognition Letters, 152(December 2021), 283-294 SCI, Q1 IF: 4.757. ISSN: 0167-8655.

2. Dr E Saravana Kumar, "Internet of things (IoT)-based unmanned intelligent street light using renewable energy" International Journal of Intelligent Unmanned Systems, Vol 10, Issue1, pp:34-47, 7 January 2022, SCOPUS Q3ISSN: 2049-6435.

3. E Saravana Kumar, An Ai Neural Link for Human Storage and Processing, International Journal of Advance Research and Innovative Ideas in Education, Volume-8 Issue-3 2022, ISSN: 2395-4396, ISSN(O): 2395-4396……

4. Buddesab, Rekha. P, Raghu Rama moorthy, E Saravana Kumar," Energy Efficient Routing with Correlation based Data Transmission Reduction in UASN "journal of Jilin University (Engineering and Technology Edition) Vol: 41 Issue: 08-2022 DOI 10.17605/OSF.IO/6EA7S.

5. E Saravana Kumar and R Ch. A Naidu "An Exploration of Heart Disease Prediction Algorithms Using Machine Learning Techniques" International Journal of innovative Research in Advanced Engineering in 6th International Conference on Awareness in Computer & Communication Engineering (ACCE - 2022), held on 12.08.2022 at Vemana Institute of Technology – Bengaluru.

6. E Saravana Kumar and R Ch. A Naidu". An Art of Review In Predicting The Rose Plant Diseases Using Image Processing With Machine Learning" International Journal of innovative Research in Advanced Engineering, 6th International Conference on Awareness in Computer & Communication Engineering (ACCE - 2022), held on 12.08.2022 at Vemana Institute of Technology – Bengaluru.

7. Shobha T, Seema Patil, R Ch. A Naidu, E Saravana Kumar, Vengatesan K, "Review on Side-Effects of Covid-19 In The Growth of Neurologic Diseases", Turkish Journal of Physiotherapy and Rehabilitation; 32(2):1595-1598, 2021, (Scopus Indexed) and also Recognized by WHO-ID: covidwho-1218842.

8. Shobha T, Seema Patil, R Ch. A Naidu, Dr. E Saravana Kumar, Vengatesan K, "Pulmonological Disorders Caused Due to Covid-19 Pandemic", Turkish Journal of Physiotherapy and Rehabilitation; 32(2): 1280-1284, 2021, (Scopus Indexed) and Recognized by WHO-ID: 1218825.

9. R. Raghu,"An enhanced distance and residual energy based congestion aware ant colony optimization routing for vehicular ad hoc networks. International Journal of Communication Systems, e5179." Indexed in SCI and SCIE Q1, IF:1.89.

10. R. Raghu,"An Enhanced Bio-Inspired Routing Algorithm for Vehicular Ad Hoc Networks. Trends in Sciences", Vol.19(10), 4188-4188." Indexed in SCOPUS and WOS, Q2, IF: 0.9.

11. Lenish Pramiee, "Prediction of Parkinson's Disease using machine learning algorithms and web Applications" has been published in International Journal of creative research thoughts, ISSN:2320-2882 IJCRT, 6th June 2022.

PATENTS

1. Buddesab "Iot Based Smart Energy Theft Detection and Power Monitoring System for Smart Homes" and Patent number 202141035598, Publication Date: 13/08/2021.

2. Buddesab" Development of Multi-Sensor Smart Robot for Intelligent Border Security Surveillance Systems "Patent number 202141033795, Publication Date: 06/08/2021.

3. Buddesab "Models of Cyber Security and Data Privacy Analysis for Indian Consumers" E-Commerce Decision Making Patent Number 202211043969, Publication Date: 02/08/2022.

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

VISION

To meet the educational, research & service needs of the region through collaboration with academic, technical institutions, businesses, government agencies & cultural organizations, thereby, providing a platform that encourages students & faculty to continue their intellectual & professional growth.

MISSION

To develop the best Information Science Professionals, who work creatively, communicate effectively & become technologically competent and also to mould them into good citizens by inculcating sense of ethical values in them.

ABOUT THE DEPARTMENT

The department of Information Science and Engineering was established in the year 2000, with the objective of molding young boys and girls into Information Science Engineering professionals. The department has a four-year full time BE program and a two-year MTech (CYBER SECURITY) program with an annual intake of 120 and 18 respectively. These courses are imparted with deep theoretical and practical learning, for the perfect blend of techno managerial skills and hands activities. The department has been thrice accredited by NBA.

HOD'S PROFILE

Dr. R. Kanagavalli, currently working as Professor & Head, Department of Information Science and Engineering, The Oxford College of Engineering. She completed B.E in Computer Science and Engineering from Bharathiyar University in the year 1998 and M.E in 2004. She has obtained PhD in Information and Communication from Anna University in the year 2013. She has 17 years of teaching experience. Her area of interest is Video processing, Image processing and Cryptography. Under her guidance 6 research scholars are doing research in video processing and Image processing. Under her guidance one scholar has submitted thesis and waiting for the final viva voce. She has published 10 papers in various reputed journal like SCI, Scopus etc. and participated and presented papers in Conferences. She has published a patent with title "Soil classification for planting and monitoring using FCNN based IoT smart agriculture system". Under her guidance 3 batch students got fund from Karnataka State Council for Science & Technology under Student Project Promotion Scheme. She is acting as thesis evaluator for various universities and going as external examiner for PhD viva voce exams.
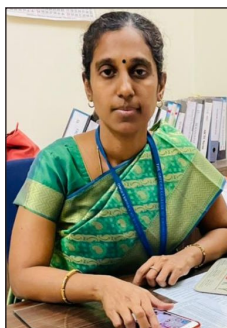
ACADEMIC ACHIEVEMENTS
Toppers of 2018-2022 Students

Abitha A
(1OX18IS004)
CGPA: 9.4

Inchara T
(1OX18IS029)
CGPA:9.4

Aradhana M K
(1OX18IS067)
CGPA:9.4

Selvi S
(1OX18IS067)
CGPA: 9.2
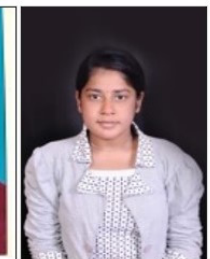
Sireesha S
(1OX18IS074)
CGPA:9.15

Performance of 2017-2021 Batch
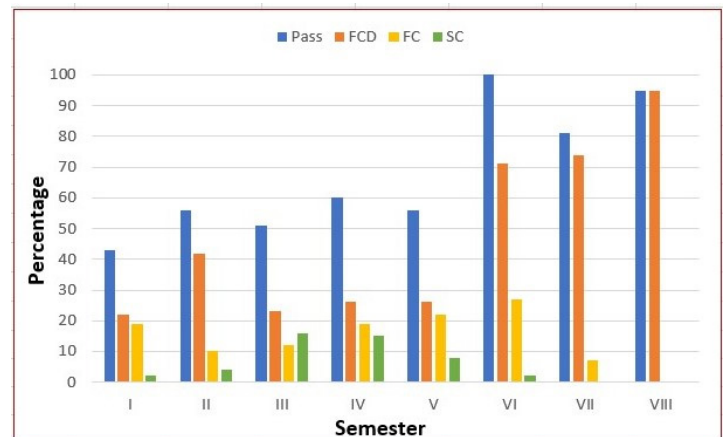
Success rate of 2017-2021 batch is 71%

SEM	Student Appeared	Pass	FCD	FC	SC
Semester wise Performance Analysis of 2017-21 Batch					
		%	%	%	%
I	65	43	22	19	2
II	64	56	42	10	4
III	72	51	23	12	16
IV	68	60	26	19	15
V	62	56	26	22	8
VI	62	100	71	27	2
VII	62	81	74	7	0
VIII	62	95	95	0	0

Performance of 2018-2022 Batch

Success rate of 2018-2022 batch is 76%

SEM	Student Appeared	Pass	FCD	FC	SC
		%	%	%	%
I	83	63	48	13	2
II	82	70	54	14	2
III	77	68	53	12	3
IV	77	100	87	12	1
V	77	75	75	0	0
VI	77	100	86	14	0
VII	76	91	68	22	1
VIII	76	99	99	0	0

Semester wise Performance Analysis of 2018-22 Batch

Guest Lectures Organised

Sl. No	Date	Title of the Guest Lecture	Resource Person
1.	03-11-2021	Session on Problem Solving and Ideation Workshop	Mr. Anshu Agrawal
2.	01-10-2021	Entrepreneurship and Innovation as career opportunity	Ms. Jeysri LS
3.	10-11-2021	Exposure and field visit for problem identification	Mr. Harshith TR
4.	04-12-2021	Expert talk	Ms. Varsha Lokesh
5.	24-11-2021	Developing Online Repository of Ideas Developed and Way forward plan	Mrs. Sushmita Katherine J
6.	06-12-2021	Swarm Intelligence in HealthCare	Dr. Vishwanath Reddy
7.	30-11-2021	Web Development Workshop	Mr. Akhel P. Mr. Ponar Chandran. Mr. Mohammad Asif

Industrial visit

Industrial visit at Ethnus was on 18th June 2022 (Saturday) at 10 am.

Outreach Programs Organized

Sl. No.	Date	Activity
1.	19-07-2021	Awareness of Air Pollution at Bommanahalli signal, Bangalore
2.	22-07-2021	Awareness of Wearing Mask at TOCE Campus
3.	24-07-2021	Sapling drive at the Bilekahalli Park in Vijaya Bank Layout
4.	27-07-2021	Awareness on Nutritious food at Mangammanapalya

Students Achievements

1. Chandrasekhar V from final year participated in virtual project expo-21 organized by SRM Institute of Science and Technology and certified on 21st December 2021.

2. Students from 3rd year Ajay K S, Chinchu Sunil, Bhuvaneswari C M and Farheen Khatoon awarded 2nd prize in Smart India Hackathon

3. Students from 4th year Poorna Chandra Kashi and Akhel P awarded participation certificate in Smart India Hackathon

4. N S Dhanush, Aishwarya, Jyothi G and Police patil Sowmya have done the project "Compact NN Based Smart Pen "under the guidance of Prof. S Vidhya selected for state level seminar and exhibition held at Visvesvaraya Technological University (VTU), Belagavi on 12th and 13th August 2022.

5. Anand Theertha V, Abhishek N, Anuhya Y, Nagavarshitha C H have come out with the project "Smart Blind Stick with Object Detection and Assistance" under the guidance of Dr. R Kanagavalli, Prof. Yadhukrishna M R selected for state level seminar and exhibition held at Visvesvaraya Technological University (VTU), Belagavi on 12th and 13th August 2022.

Funded student projects in the academic year 2021-2022

Sl. No.	Title of the project	Student	Guide	Funding Agency
1.	Assistant Vehicle for Elderly People using Zero UI Technology	Shravani B. Suma R. Sireesha S. Sushma Gudimani	Dr. R. Kanagavalli	VTU, Belagavi
2.	Intelligence Surveillance Patrolling DRONE	Abhishek K.H. Aishwarya N. Chandrashekar V. Akhel P.	Dr. Vanajaroseline E. Chirchi	VTU, Belagavi
3	Smart Navigation Robot Using Raspberry Pi	Sanjay R. Sandeep Hedge Syed Imaaduddin Y.G. Prateek	Prof. Visalini S.	VTU, Belagavi
4	Anti-sleep alarm for drivers	Ambika T. Meghana M.R. Punyashree G. Rida Fathima	Prof. Preeja Mary	VTU, Belagavi

FACULTY ACHIEVEMENTS

FDP ATTENDED

1. Dr. Vanajaroseline Chirchi attended FDP with title "Inculcating Universal Human Values in Technical Education" organized by AICTE From 11th April 2022 TO 15TH April 2022

2. Dr. Vanajaroseline Chirchi attended FDP with title "National Intellectual Property Awareness Mission" organized by Intellectual property office on 10th February 2022

3. Dr. Vanajaroselin Chirchi attended FDP with title "Machine Learning Applications for Autonomous Driving" organized by ATAL on 17thJan 2022 to 21stJan 2022

4. Prof. Indu K S attended FDP with title "Data Science and Machine Learning" organized by TOCE on 7th march 2022 to 11th march 2022

5. Prof. Visalini S attended FDP with title "Data Science and Machine Learning" organized by TOCE on 7th March 2022 to 11th March 2022

6. Prof. Visalini S attended FDP with title "Global Navigation Satellite System and Location Based Services" conducted online on 21st Feb 2022 to 4th march 2022

7. Prof. Visalini S attended FDP with title "Deep Based Learning Based Efficient Code Optimization In Software Engineering" organized by SRM Institute of science and technology on 24th, 25th Feb 2022.

8. Prof. Visalini S attended FDP with title "Big Data Analytics and Machine Learning" organized by East point college of engineering and technology on 26th march 2022 to 1st April 2022.

9. Prof. Madhusmitha attended FDP with title "Artificial Intelligence" organized by Tec Saksham on 14th Feb 2022 to 18th Feb 2022

10. Prof. Vidhya S attended FDP with title "Advanced Ai and Ml"" organized by ISE, TOCE on 12th to 17th July 2021.

11. Prof. Sandhya Rani V attended FDP with title "Advanced Ai and Ml" organized by ISE, TOCE on 12th to 17th July 2021.

12. Dr. Vanajaroselin Chirchi attended FDP with title "Advanced Ai and Ml" organized by ISE, TOCE on 12th to 17th July 2021.

13. Prof. Vidhya S attended FDP with title "Data Science and Deep Learning" organized by TOCE on 26th to 31st July 2021.

PUBLICATIONS FROM THE DEPARTMENT

1. R. Kanagavalli, "Assistant Vehicle for Elderly People Using Zero Ui Technology" in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 7, July 2022, Page No:6531.

2. Vanajaroseline E Chirchi, "Sleep Pattern Monitoring Pillow Using Knn and Smart Band" And "Intelligence Surveillance Patrolling Drone" in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 7, July 2022, Page No:6663 and Page No:6278.

3. Visalini S, "Smart Navigation Robot Using Raspberry Pi" and "IoT Deployed Automatic Smart Machine Movable Road Divider" in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 7, July 2022, Page No:6620.

4. Vidhya S, "Compact Nn Based Smart Pen" in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 7, July 2022, Page No:6642.

5. Madhusmitha Mishra, "Facial Reconstruction of Masked Face Using Generative" And Title "Real Time Assistive Shoe for Visually Impaired People" in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 7, July 2022, Page No:6696.

6. Karthik Raj S L "Mobile Crowd Sensing Platform Using AI and Blockchain "in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 7, July 2022, Page No:1111.

7. Indu K S, "Sign Language Translator for Speech and Hearing Impaired" and "Early Detection and Classification of Brain Tumor "in International Journal of Innovative Research in Computer and

communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 7, July 2022, Page No:6262 and Page No:6541.

8. Preeja Mary, "Anti Sleep Alarm for Driver Using Iot and Ml" in International Journal of Innovative Research in Computer and communication engineering (JIRCCE). ISSN:2320-9798 Volume 10, Issue 7, July 2022, Page No:6613.

9. Vanajaroseline E.C, "Data storage on cloud using key-aggregate cryptography elliptic curves" in Strad Research UGC CARE Group-2 and Web of Science Indexed Journal,2022

10. Vanajaroseline E.C, "Scanning method for segmentation in iris biometric authentication for security systems" in GIS Science Journal UGC-CARE Group-II Journal,2022.

11. Vanajaroseline E.C," Big Data Processing in Internet of Things (IoT) Systems" in Book Chapter –Nova Publishers, USA,2022.

12. Preeja Mary, Govinda C V, Naveen G Ganapa, Mullai Vendhan R M, Vijay Adhithyan S K, "Smart Military Helmet Using CNN" in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 7, July 2022, Page No:6723.

13. Yadhukrishna M R, "Video summarization using NLP" in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 7, July 2022, Page No:6501.

14. Vanajaroseline E.C and Sangeetha, "Role of Blockchain Technology in Digitisation of Land Records in Indian Scenario" in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 7, July 2022, Page No:5805.

15. R. Kanagavalli and Karthik Raj S L, "Health Band Using IOT" in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 6, July 2022, Page No:5217.

16. Channappa Gowda D V, "Smart Robotic Library Using IoT" in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 6, July 2022, Page No:6763.

17. R Kanagavalli, "Smart Irrigation with Plant Disease Detection Using Image Processing" in International Journal of Innovative Research in Computer and communication engineering (IJIRCCE). ISSN:2320-9798 Volume 10, Issue 6, July 2022, Page No:6752.

PATENTS

1. Dr. R. Kanagavalli, Dr. Vanaja Roseline E. Chirchi and Prof. Kokila "Soil Classification for Planting and Monitoring Using FCNN-based IoT Smart Agriculture System" and Patent No. 202241001148 A, publication date: 21/01/2022.

2. Prof. Vidhya S "Design of Concrete Curing Box in Building Construction Application" and Patent No. 202141049865 A, publication date: 26/11/2021.

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

VISION

To impart technical education par excellence and prepare leaders to serve the industries and society.

MISSION

- **M1 -** To provide the world with a highly committed and quality conscious Engineering workforce.
- **M2 -** To encourage the students to build self-help, power of initiative, courage to change and create new things.
- **M3 -** To inculcate the spirit of cooperation and capacity for organization with special emphasis on their self-reliance and sustainability to meet ever changing requirements of local and global industries.

ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering started in the year 2000 and has been in the forefront of imparting quality education to the students. The department has a strong undergraduate program with an intake of 120 students. At the postgraduate level, offers M.Tech in VLSI and Embedded Systems. At present, 24 faculties of the department have registered for Ph.D program; 9 research scholars were awarded Ph.D from the R&D of Electronics and Communication Engineering Department. UG and PG students are encouraged to undertake various research projects in department R&D and are given regular value-added courses and soft skill programs to meet the needs of employability. The unwavering commitment towards students along with a pool of experienced and dedicated teaching faculty makes the department distinguished and the most sought after.

HOD'S PROFILE

Dr. Manju Devi is the Professor and Head of the Department of Electronics and Communication Engineering, at The Oxford College of Engineering, Bangalore. She has 26 years of teaching experience & 14 years of research experience. She has a Ph.D. (VLSI Design), VTU, M.Tech. (Electronics) VTU and B.E (Electronics & Communication Engineering). She is an approved guide in VTU, one student has completed PhD degree under her supervision and eight research scholars are pursuing Ph.D. under her guidance. She has published 4 patents, four book chapters and 75 research papers in national and international Journals. She is also a senior member of IEEE and Life member of Indian Society for Technical Education (ISTE) and Life member of The Institution of Electronics and Telecommunication Engineers (IETE). She is also a Photonic Executive member of Photonic Society and mentor of many students for the internship program conducted under Photonic Society.

ACADEMIC ACHIEVEMENTS
Student Toppers List (2018-2022 batch)

Acsah Mary Ben (1OX18EC004)
CGPA – 9.37

Brinditha Ravi (1OX18EC019)
CGPA – 9.32

Tejaswini (1OX18EC031)
CGPA – 9.3

Bhavya G (1OX18EC017)
CGPA – 9.2

Brunda K (1OX18EC020)
CGPA – 9.2

SEM	Students Appeared	Overall Pass %	FCD %	FC %	SC %
I	83	66	53	13	0
II	82	83	45	34	4
III	86	65	34	26	5
IV	86	100	86	14	0
V	85	71	58	13	0
VI	85	100	93	7	0
VII	87	93	87	6	0
VIII	87	98	98	0	0
VIII	76	99	99	0	0

2017-21 BATCH
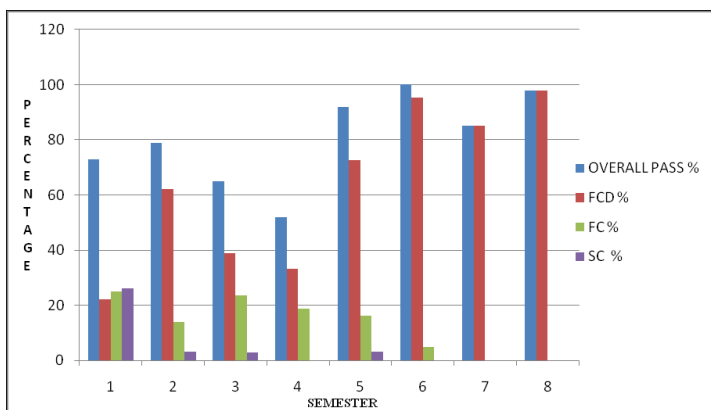
The Success rate of the 2017-2021 passed out batch is 74.07%

Performance of passed out students

2018-22 BATCH

The Success rate of the 2018-2022 passed out batch is 73.53%

SEM	Student Appeared	Pass %	FCD %	FC %	SC %
I	74	73	22	25	26
II	72	79	62	14	3
III	71	65	38.9	23.6	2.8
IV	69	52	33.3	18.8	0
V	62	92	72.6	16.1	3.2
VI	62	100	95.2	4.8	0
VII	62	85	85	0	0
VIII	62	98	98	0	0

WEBINARS/CONFERENCES ORGANIZED

Sl. No.	Date	Title	Resource person
1.	16/07/2022	Startup Opportunities for photonics Industry	Dr. C.L.Triveni, Associate Professor, Department of Electronics & Communication Engineering, Malnad College of Engineering, Hassan
2.	01/07/2022	Quantum Communication and Computing	Dr. Srinivas Talabatulla, Professor, Electronics & Communication Engineeing, IISc, Bangalore.
3.	02/07/2022	Challenges and Opportunities in Biomedical Applications	Dr. Kalpana, Professor, ECE, BMSCE, Bangalore
4.	08/06/2022	Opportunities in VLSI Industry	Dr. Vaishali Dhare, Professor, VLSI Design, Nirma University, Ahmedabad.
5.	31/05/2022	Exclusive Prospect of Career Counseling and Innovation Abroad Educational Programs	Ms. Anjana Jain, Senior Admission Counselor, Texas Review.
6.	29/03/2022	Innovation and design thinking on optical network	Dr. Sangeetha R G, Associate Professor (Senior), School of Electronics Engineering, VIT University, Chennai Campus

7.	05/02/2022	Familiarization of SAP for Entrepreneurship as a career opportunity	Dr. Sanjay Barnwal, IT Manager, APAC & MEA, Bangalore
8.	21/01/2022	Intelligent Radio for 5G Communication	Dr. Chris Prema, Assistant Professor, Department of Avionics, Indian Institute of Space Science and Technology, Trivandrum
9.	06/01/2022	Design thinking Implementation on importance of Internship and Project	Dr. T. Jesudas, Professor & Head, Department of Mechatronics, Mahendra Engineering College, Namakkal, Tamil Nadu
10.	27/12/2021	orientation session on "National Innovation and Startup Policy"	Dr. Gagandeep Kaur Gulati, Educationalist, Authorpreneur, Corporate Trainer, Founder – weaving Dreams, New Delhi
11.	18/12/2021	Biomedical Technologies for Defense Applications	Dr. K Mohana Velu, Scientist 'F' & Joint Director, DEBEL, DRDO
12.	27/08/2021	Use of solar energy inventions for industrialization of under developed countries	Dr. Anand Mohan Sharan, Professor, Memorial University, Canada
13.	08/07/2021	Meta materials & its applications – A soft computing approach	Dr. Prakash Ranjan, Professor, Department of ECE, IIIT, Bhagalpur
14.	09/07/2021	Technology based Autonomous Car	Dr. Sachin Kumar, Professor, Department of ECE, Amity School of Engineering & Technology, Amity University, Lucknow, Uttar Pradesh
15.	07/06/2021	Implementation of National Education Policy (NEP) 2020	Dr. K M Ravikumar, Member Subcommittee-2 Task force for implementation of NEP 2020 in Karnataka

Industrial visit to U. N. Rao Satellite Centre, Bangalore
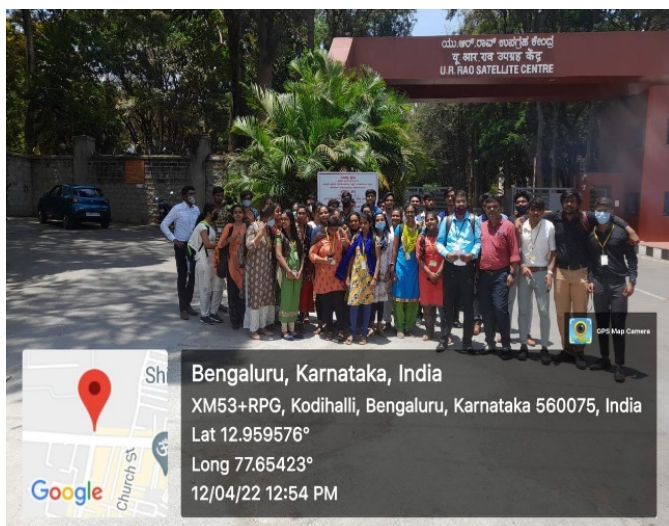
The students of 8th semester ECE had visited the U. N. Rao Satellite Centre on 12th April 2022.

Outreach Activities

Sl. No	Date	Title of the event	Place
1.	12/05/2022	Rally	The Oxford College of Engineering, Bangalore
2.	11/05/2022	Akhil Karnataka Prani Daya Sangh-for Animal Welfare	Akhil Karnataka Prani Daya Sangh, 6th block, Koramangala, Bangalore.
3.	22/12/2021	Cattle Welfare	Akhil Karnataka Prani Daya Sangh, 6th block, Koramangala, Bangalore.
4.	11/12/2021	Volunteering Job fair for Persons with disabilities	Manpho Bell Hotel and Convention center, Railway station, Railway colony, Next to Bangalore City Majestic, Bangalore.
5.	01/11/2021	Anveshan to discover	IPDP, Vidhan Soudha Layout, Bangalore
6.	12/08/2021	No more Plastic	Vivek Nagar, Bangalore
7.	27/07/2021	Awareness about Government Acts & Schemes	Kudlu Gate, Bangalore
8.	14/07/2021	Corona Awareness	Koramangala, Bangalore
9.	13/07/2021	Plantation of Trees	Ambalipura Lake Premises, Bangalore

MOU Signed

An MOU has been signed between Oxford Dental College and R&D, Department of ECE where in collaboration with department of Orthodontics, a dental model was developed for the analysis of Bite force measurement after surgery.

STUDENT ACHIEVEMENTS
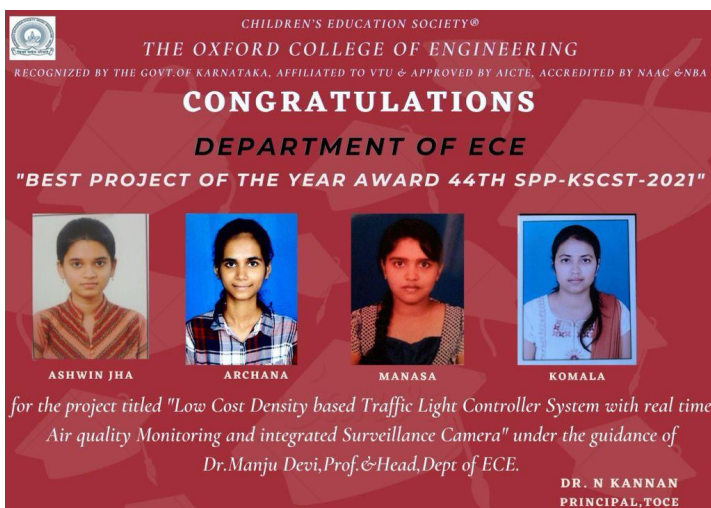
Ashwin Jha, Archana, Manasa and Komala won the "Best Project of the year award" under the 44th SPP, KSCST-2021 for the project titled "Low-cost Density based Traffic Light Controller System with real time Air quality Monitoring and integrated Surveillance Camera" under the guidance of Dr. Manju Devi.

KSCST & VTU Funded Student Projects

Sl. No	Title of the Project	Name of the students	Name of the guide(s)	Funding Agency
1.	UVC Based Disinfection Robot with Automatic Hand Sanitizer for Covid-19	Nikhil B.K. Srividya B.N. Greeshma N. Aishwarya S.	Ms. Lakshmi R	VTU
2.	IOT based smart home security system using Raspberry pi	Girish Gowda H.M. Manoj H.P. Jayaprakash Reddy C. Praful Gopal Jorapu	Ms. Aruna	VTU
3.	Prosthetic Leg	Kusuma Bhavana Nithin Abhishek	Dr. Preeta Sharan & Mr. Jayaraj N.	KSCST
4.	Low-Cost Density based Traffic Light Controller system with real time air quality monitoring and Integrated surveillance camera	Ashwin Jha Komala Manasa Archana	Dr. Manju Devi	KSCST
5.	Appraising System for Stubble burning using humanoid skull	Vanishree Padmavathi Rashmi Ruchitha V.	Dr. Manju Devi	KSCST
6.	Automatic mask and medicine vending machine with automatic hand sanitizer and refilling	Divya Aishwarya Allam Aravind Kumar Rakshitha P.	Mr. Jayaraj & Dr. Preeta Sharan	KSCST
7.	Contactless Door and Doorbell security system for pandemic	Sanjay S.N. Venu Prasad K.M. Vijay Kumar D.B. Sharana Basava	Mr. Jayaraj	KSCST (2021)

DEPARTMENT PUBLICATIONS

1. Manju Devi, "CT image reconstruction using NLM Fuzzy CD regularization method", Current Medical Imaging, Vol.17, issue-9, pages 1103-1113, Bentham Science Publishers, indexed in web of Science.

2. Manju Devi and Laya Tojo, "Medical image denoising using Scaled Dual Convolution Neural Networks (SDCNN)", 2021 International Conference on Computational Performance Evaluation (ComPE), December 2021, Electronic ISBN – 978-1-6654-3656-4, Print on Demand ISBN -978-1-6654-3657-1.

3. Manju Devi, "A Survey of soft computing Approaches in Biomedical Imaging", Journal of Health care Engineering Indexed by Scopus, 2nd August 2021, Vol.2021, Hindawi Publishers.

4. Manju Devi and Laya Tojo, "Deblurring Algorithm using Alternating Low Rank Augmented Lagrangian with Iterative Priors", Journal of Physics conference series, Indexed by Scopus, 1st July 2021, Vol.1964, issue-6, pages-062041, IOP publishing.

5. Manju Devi, "Pre-current amplifier based trans-impedance amplifier for biosensors", International Journal of Reconfigurable and Embedded Systems (IJRES), Vol. 11, No. 2, July 2022, pp. 188~195 ISSN: 2089-4864

6. Preeta Sharan, "Real time implementation of Fiber Bragg grating sensor in monitoring flat wheel detection for railways", Journal Engineering Failure Analysis, JCR Ranked, Peer reviewed, open access journal, SCI, Q1, 1st August 2022, Vol.138, Pages 106376, Pergamon Publishers.

7. Preeta Sharan, "Compactness measure of rail wheel rolling contact of the freight wagon", IJIT indexed by Google Scholar, ISSN – 2454-5414, Scopus, 22nd May 2022, International Journal of Information Technology, Pages 1-8, Springer Nature, Singapore.

8. Preeta Sharan, "Oral cancerous cell detection using Modified Effective Refractive Index Method", 9th International Conference on

Computing for Sustainable Global Development, INDIACom, Pages 476-480, IEEE, 23rd March 2022.

9. Preeta Sharan, "Theoretical investigation of Bragg reflector optical sensor for the measurement of cryogenic temperature", Materials Today: Proceedings, Elsevier, Scopus indexed, 4th April 2022.

10. Preeta Sharan, "2-D transition dichalcogenides assisted SPR biosensor for rapid detection of urine glucose", SPIE Advanced Biophotonics Conference (SPIE ABC 2021), 11th January 2022, Vol.12159, Pages 5-14.

11. Preeta Sharan, "Design and Analysis of Outer Rotor Brushless DC motor for Robotics using Ansys Maxwell software", Springer, Cham, indexed by Scopus, 2022, New Trends and Applications in Internet of Things (IOT) and Big Data Analytics, Pages- 93 to 107.

12. Preeta Sharan, "An Optical solution for High-Density Data Storage using Plasmonic based MZI Nano-structures", New Trends and Applications in Internet of Things (IOT) and Big Data Analytics, 2022, Pages- 139 to 148Springer, Cham, Scopus.

13. Preeta Sharan, "Mono Layer Graphene Based Plasmonic Bio-sensor for Urine Glucose Detection", Proceedings of Trends in Electroncis and Health Informatics, 2022, Pages 459 -468, Springer, Singapore, Scopus.

14. Preeta Sharan, "Sensitivity Enhancement of a plasmonic biosensor for urine glucose detection by employing black Phosphorus", JOSA B Journal, Optica Publishing group 2020, SCI, 1st January 2022, Vol.39, Issue-1, Pages 200-206.

15. Preeta Sharan, "Modeling, Simulation and Computational Analysis of plasmonic optical sensor using BATiO3 in Diabetes Mellitus", International Journal of Information Technology Indexed by Scopus, December 2021, Vol.13, Issue 6, Pages 2163-2168, Springer, Singapore.

16. Preeta sharan, "Design and Implementation of MOEMS based Optical diaphragm using Photonic Crystal for the prevention of barotrauma", Results in Optics, Scopus, 1st December 2021, Vol.5, Pages 100-191, Elsevier.

17. Preeta Sharan, "Design and implementation of two-dimensional crossbar switch scheduler for SOC using quantum dot cellular automata and system verilog", NVEO- Natural Volatiles and Essential Oils indexed by Google Scholar, 20th December 2021, Pages 5520 – 5532.

18. Preeta Sharan, "Cloud to Cloud data migration using self-sovereign identity for 5G and beyond", Cluster Computing indexed by SCI, 15th November 2021, Pages 1-15, Springer US.

19. Preeta Sharan, "Detection of oral Cancerous cells using highly sensitive one-dimensional distributed Bragg's reflector Fabry Perot Microcavity", Optik indexed by SCI, 1st October 2021, Vol.244, Pages 167599, Urban & Fischer Publishers.

20. Preeta Sharan, "Computational Analysis of core cavity Mach-Zehnder interferometer based optical sensor for various types of virus", Indian Journal of Engineering and Materials Sciences (IJEMS) indexed by SCI, 7th August 2021, Vol.28, Issue 2, Pages 209-215.

21. Chrispin Jiji, "Hybrid Technique for improving underwater image", 3C Technologia, ISSN 2254-4143, Edicion Especial special issue, November 2021, indexed by Scopus.

22. Dr. Chrispin Jiji, "Novel method to Reconstruct an Image using Hybrid Decomposition", Design Engineering Journal, 2021, Vol.2021, Issue 7, Pages 11002-11015.

23. Sowmya Padukone G, "Disease Prediction and detection in animals by DNA genetic Engineering using Optical sensor based on Silicon material", Materials today: Proceedings – Elsevier 2022, Scopus Indexed Journal, 12th February 2022.

24. Sowmya Padukone G, "Genetic Expression and clustering analysis related to DNA microarrays using Optical Sensors manufactured using Silicon material", Materials today: Proceedings – Elsevier 2022, Scopus Indexed Journal, 7th January 2022

25. Yashas Gowda, Vignesh P, Sharath Raj Urs P and Tharun PS "A smart Asssistive Device for Quadriplegic patients", 6th National Conference on Science, Engineering, Management and Architecture, NCSEM-2k22, 1st and 2nd July 2022 and secured second place.

STUDENT AWARDS

1. Abhishek Gopalakrishna Bhat and Ajith Kumar Sah of 6th semester won cash price of 10k in National level Techno Exhibition organized by Dr. AIT, Bangalore.

2. Ajith, Manoj, Navya S and Dhanya secured second place in the project exhibition held on 1st July 2022 as a part of the 6th National Conference on Science, Engineering, Management and Architecture, NCSEM-2k.

3. Abhishek Gopalakrishna Bhat, Rakesh BR, Revathi S, Sindhu S of 6th semester bagged the winner prize with 2.5 lakh at SymbIOT organised by the Dept. of ECE, Vidyavardhaka College of Engineering, Mysuru in association with IOTCrew on June 10th and 11th 2022. This included 25k cash prize, Electronics development kit, subscriptions and goodies with a rolling trophy for their innovative approach of integrating multiple bank cards into a single, secure and smartcard.

4. **Ramya G, Ranjitha R, Nandini and secured third position in the Techno-Hackathon 2k22 competition organized by AICTE-spices-ABHILASH club, TOCE held on 23rd March,2022.**

5. **Revathi S, Sindhu S, Rakesh BR, Ajith, Abhishek and Naveen participated in the National level IDEATHON on science organized by the Department of MCA, The Oxford College of Engineering, Bangalore.**

FACULTY ACHIEVEMENTS

Dr. Preeta Sharan got awarded on international women's day by Government of India, Principal Scientific adviser with his excellency British High Commissioner, she is among 75 women scientists in STEAM.

Dr. Neethu PS, Mr. Jayaraj N, Ms. Laya Tojo and Ms. Lakshmi R completed NPTEL course on "Digital system Design" conducted by IIT, Madras from Jan 2022 to April 2022.

FDPs Organized

The department had organized one-week FDP on "Recent Trends in Photonics" where academicians from IIT, NIT, IISc delivered the expert talk on relevant topics during 14th -19th June 2021. The programme was inaugurated by Dr. Manpreet Singh Manna, Ex-Director, AICTE.

FDPS ATTENDED BY FACULTY

1. Dr. Manju Devi, Ms. Sunitha L and Ms. Iffat Fathima attended an FDP on "Recent Trends in Microwave & Antenna Technology" during 15/11/2021 to 19/11/2021 organized by East Point College of Engineering &Technology, Bangalore.

2. Dr. Manju Devi, Mr. Jayaraj N, Ms. Mittu George attended an FDP on "On overview of Teaching Technique in Innovation and Design Thinking" organized by AICTE-VTU Joint training programme for Teachers, VIAT, Muddenahalli, Chikkaballapur Dist during 27/12/2021 to 31/12/2021.

3. Dr. Manju Devi, Dr. Bhargava Rama Gowd, Mr. Jayaraj N and Ms. Nithika Bhasi attended AICTE sponsored FDP on "Inculcating Universal Human Values in Technical Education" organized by AICTE, Nelson Mandela Marg, Vasant Kunj, New Delhi from 13/9/2021 to 17/9/2021.

4. Dr. Preeta Sharan attended an FDP on "Photonics" from 15/11/2021 to 19/11/2021 organized by GAT, Bangalore.

5. Dr. Preeta Sharan attended ATAL FDP on "Quantum & Photonics" from 29/11/2021 to 3/12/2021 organized by Malnad College of Engineering, Hassan.

6. Dr. Preeta Sharan attended ATAL FDP on "Fundamental and applications of photonics crystals and meta-materials" organized by IIIT Allahabad from 4/10/2021 to 8/10/2021.

7. Ms. Sunitha L attended AICTE sponsored ATAL FDP on "Embedded Systems -An Application Drive & Approach" from 25/8/21 to 27/8/21.

8. Ms. Mohanthi and Ms. Iffat Fathima attended an FDP on "Recent trends in Biomedical Applications" from 22/10/2021 to 26/10/2021 organized by BNMIT, Bangalore.

9. Ms. Mohanthi attended FDP on "Exercising Deep Learning Approaches in Various Research" from 16/11/2021 to 20/11/2021 organized by VIT, Chennai.

10. All the ECE faculties attended the FDP on "Recent trends in Photonics" organized by the Department from 14/06/2021 to 19/6/2021.

11. Ms. Laya Tojo attended an FDP on "Antenna Design and its applications" organized by BNMIT, Bangalore from 25/06/2021 to 30/06/2021.

12. Ms. Jisha Chandra attended FDP on "Recent trends in energy and power system" from 31/05/2021 to 04/06/2021 organized by PSNIT, Tirunelveli.

13. Mr. Jayaraj N attended FDP on "Augmented Reality and virtual Reality" organized by AISSMS college of Engineering, Pune from 21/06/2021 to 25/06/2021.

BOOKS/BOOK CHAPTERS PUBLISHED

1. Dr. Manju Devi, Lakshmi R, Laya Tojo have published a chapter "Unleashing 5G for next generation health care" in the book titled "Internet of Everything Smart sensing Technologies" published by Nova Science Publishers, 17 June 2022 (Scopus indexed).

2. Dr. Preeta Sharan has published a book on "Innovative computing for Green Technologies" published by Notion Press, ISBN 9798886846744, 10th June 2022.

3. Dr. Preeta Sharan has contributed two chapters namely "Distributed Bragg Reflector Biosensor for medical applications" and "Photonic MEMS sensor for Biomedical Applications" for the book titled "Computational Health Informatics for Biomedical Applications" by CRC press, Taylor & Francis Group, Apple Academic Press, ISBN – 978-1-77491-253-9, February 2022.

4. Dr. Chrispin Jiji has Published a book "Analog Circuits and its simulation in PSpice", Vol 1, Pages 115, 23rd June 2021.

5. Dr. Bhargava Rama Gowd has published a book chapter namely "Study on Link Based routing Algorithm for the Desired quality of Service of a network", in New Approaches in Engineering Research, Vol.3, Pages 90-102, 21st June 2021.

6. Dr. Chrispin Jiji has Published a book "Electronic Devices and Instrumentation Laboratory Practice", Selfie page Developers Private Limited, 21st April 2022.

RESEARCH AND DEVELOPMENT

PATENTS FILED

1. Dr. Preeta Sharan has been granted a patent on 8.7.2021 for the topic "Photonic Crystal based Biosensor for detection of glucose concentration in Urine and Blood", patent no. 371504.
2. Dr. Preeta Sharan has filed a patent on "Wearable health monitoring and curing device" on 18.06.2021, application no. 3809/CHE/2015A.

FUNDS RECEIVED

1. Dr. Preeta Sharan received Grant-in-aid of 15.6 lakhs from AICTE, RPS for the title "Health monitoring system of Rail Wheel model using optical sensors" for the year 2021-22.
2. Dr. Preeta Sharan & Dr. Manju Devi received Grant-in-aid of Rs.2500000/- for conduction of project "Design and Development of Fiber-bragg Grating sensing system for monitoring hand grip muscle fatigue under VGST-CISEE for the year 2021-22.

AICTE, RPS sponsored project
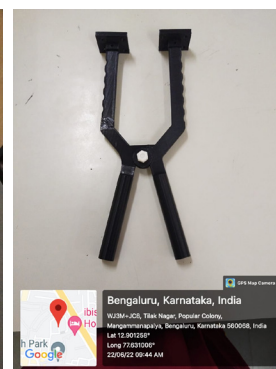
VGST, CISEE sponsored project

Mr. Shaikh Afzal Nehal Ahmed completed his defense viva and got degree awarded under VTU under the supervision of Dr. Manju Devi, Professor and Head of Department of Electronics and Communication Engineering, The Oxford College of Engineering.

Ms. Sajithra Varun S completed her defense viva on 12th August, 2021, under the guidance of Dr. R. Nagaraj, Former Vice Chancellor, Kalasalingam Academy of Research and Education, Srivilliputhur, Virudhunagar District, Tamilnadu.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

VISION

Equipping Electrical and Electronics Engineering professionals in the cutting-edge technologies of Electrical Science to meet the needs of the ever-changing world.

MISSION

- **M1:** To learn and experiment most recent innovations in Electrical and Electronics Engineering related to industry.
- **M2:** To provide state of art facilities for the continuous improvement in teaching-learning process and research activities in multidisciplinary areas.
- **M3:** To emphasis ethics, leadership, entrepreneurship skilled Electrical and Electronics Engineers.

ABOUT THE DEPARTMENT

The Electrical and Electronics Engineering Department was established in the year 2001, with an intake of 60 students for the Under Graduate Program (BE) and, the Post Graduate Program (M. Tech) in Power Electronics course was started in 2008 with an intake of 18 students. The VTU Research Centre of the department was started during 2014 and has seen good progress as many scholars have registered for PhD. The Electrical and Electronics Engineering department was accredited by "National Board of Accreditation (NBA)" for the first time in the year 2007 and the Accreditation was renewed in the year 2016. The Department of Electrical and Electronics Engineering got NBA Accreditation for the Third time for the duration of three years from 2018 to 2021.

HOD'S PROFILE

Dr. Bharath V S is a doctorate from Bharath Institute of Higher Education Research University, Chennai. He has done his post-graduation from Annamalai University and MBA from IGNOU, Graduation from Madras University. He has published several research papers in various National and International Journals (Scopus, Web of Science and SCI) with a very good Research Indices. He published two patents.

He has organized several Conferences, FDPs, Workshops, Project Exhibitions Technical Fests sponsored by various professional bodies. He worked for various Accreditation bodies for the recognition of the department. He worked under various capacities under teaching profession and is actively involved in research. His area of research includes Power Electronics and Drives, Electric Vehicles and Renewable Energy Resources. Currently he is guiding 5 research scholars under VTU University. He had guided 25 M Tech & 50 BE projects. He is a Life Member of ISTE, BOE member of VTU.

ACADEMIC ACHIEVEMENTS - Toppers List (2018-2022 Batch)
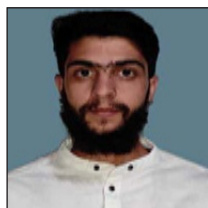
Dilbar Bashir (1OX18EE014)
CGPA:9.09

Anurag Tiwari (1OX18EE006)
CGPA:8.97

Nithya (1OX18EE040)
CGPA:8.66

Jeevitha (1OX18EE001)
CGPA:8.65

Jaya Hari (1OX18EE08)
CGPA:8.58

PERFORMANCE OF PASSED OUT BATCH (2017-2021) STUDENTS
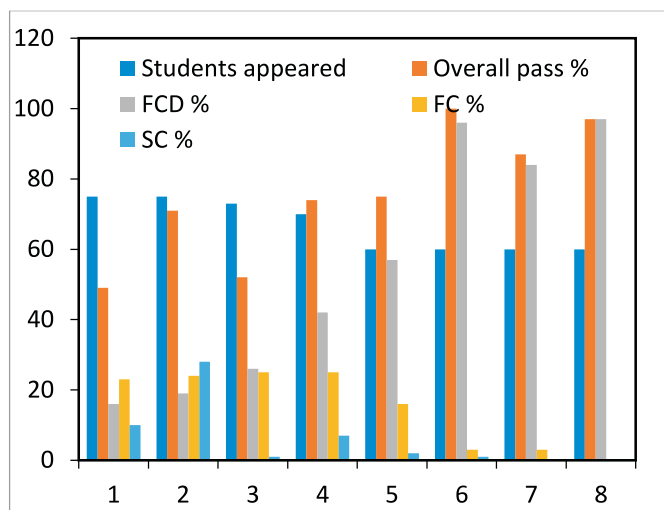
The overall success rate of the batch 2017-2021 is 90%.

Semester wise performance Analysis of 2018-22 Batch					
Sem	Students appeared	Overall pass %	FCD %	FC %	SC %
1	70	67	30	28	9
2	70	68	35	22	11
3	71	60	37	20	03
4	70	100	83	17	00
5	70	47	41	06	00
6	69	100	87	13	00
7	69	83	73	07	00
8	69	96	96	-	-

SEM	Students Appeared	Overall Pass %	FCD %	FC %	SC %
1	75	49	16	23	10
2	75	71	19	24	28
3	73	52	26	25	1
4	70	74	42	25	07
5	60	75	57	16	2
6	60	100	96	3	1
7	60	87	84	3	0
8	60	97	97	0	0

List of students pursuing higher studies from 2017-2021 batch

Sl. No.	USN	Name	Higher studies Details
1	1OX17EE027	KAVYA G S	M. Tech., VTU
2	1OX17EE055	SAGAR D	M. Tech, RV COLLEGE OF ENGINEERING
3	1OX17EE043	PAVAN PRIYA M	M. Tech., VTU

GUEST LECTURES/WEBINARS ORGANIZED

Sl. No.	Date	Title of the Guest Lecture/Webinar	Resource Person
1.	04-06-2022	Institutions Innovation Council in association Opportunities for Students– Entrepreneur Skills for Small Scale Industries	Dr. Tharakarami Reddy
2.	09-05-2022	Design & Critical Thinking of DC-DC Power Converters, PCB Design & Circuit Fabrication	Ms Aswini, Research Scholar, SRM University, Andhra Pradesh
3.	10-05-2022	Prototype/ Process Design and Development- Prototyping on Electronic Products	Mr. Krishna Das Engineering Manager, Bosch Sample Shop Bosch Global Software Technologies Ltd

The Overall Success rate of the batch 2018-2022 is 87%.

4.	04-05-2022	R & D Innovation on Advancement in Battery Technology	Dr. Durgamba P B, Research Scholar, PES University, and Bengaluru
5.	18-06-2022	Panel Discussion with Innovation and Start up Ecosystem Enablers	Dr. Amit Kumar, Assistant Professor, Dept of EIE, Thapar Institute of Engineering & Technology, Patiala, Punjab
6.	11-06-2022	R & D Innovation on Transformation of a Problem to a Product - An Aerospace Example	Mr Sukesh, Nirmala Poosari, Program Manager in Honeywell, Bengaluru

INDUSTRIAL VISIT

The Oxford College of Engineering, Bengaluru, Department of Electrical and Electronics Engineering organized Industrial visit to Mahatma Gandhi Institute of Rural Energy and Development (MGRDI), Jakkuru Bengaluru on 24th June 2022.

Outreach programs organized

Sl.No.	Date	Activity
1.	15.07.2021	Awareness program on Hazardous of Plastic materials
2.	17.07.2021	Visit to Old Age Home Prasantha Charitable Trust, Bengaluru
3.	19.07.2021	Swatch Bharat Abhiyan
4.	20-06-2021	Awareness on hazardous of plastic materials
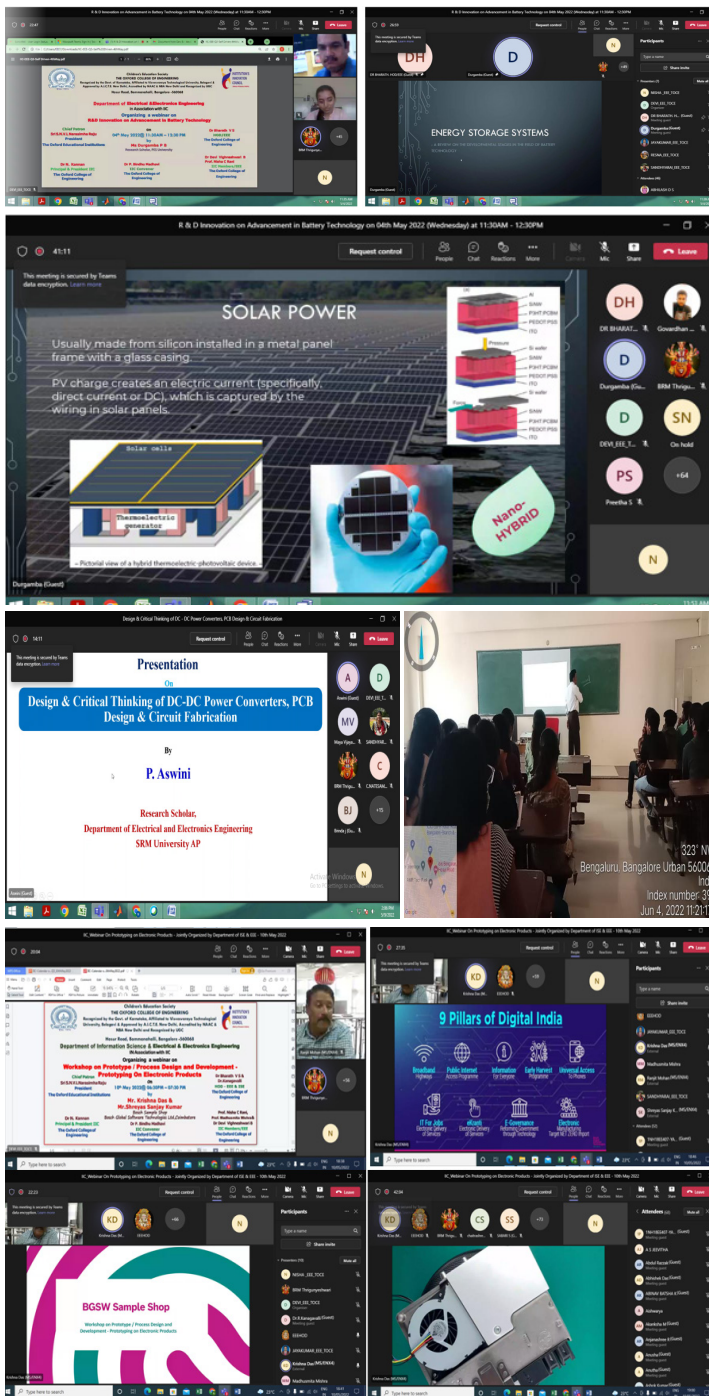
Glimpse of webinar/Guest lecture organised

Glimpse of out reach programs organised

Memorandum of Understanding

- An MOU has been signed between Gen Ed Technologies, Bengaluru with department of EEE, in Oct 2021
- An MOU has been signed between Prinston Smart Engineers, Bengaluru with department of EEE, in Sept 2021.

Funded student projects in the academic year 2021-2022

Sl. No.	Title of the project	Student	Guide	Funding Agency
1	Use of super capacitors in permanent magnet synchronous motor drive for E- mobility	Sahana G H Roshan S Telagi Shahshikumar M Abhilash D S	Mr. N Jayakumar	KSCST
2	Voice and Gesture controlled wheel chair	Suharsha L Aishwarya A K Ashwini M R Sanjana K G	Mrs Sumitha T L	KSCST
3	Automatic Self driving Car	Nithya N Kusuma G Naik Shivaprasad L Kulkarni Surya B	Dr Bharath V S	VTU
4	IOT Based Development of smart dustbin with monitoring and tracing system	Harshith J G Gagana S M Nisha H N Sandeep K	Mr N Jayakumar	VTU

STUDENT ACHIEVEMENTS

Singamsetti Jayahari, Sneha V, Sushma S, Mamatha G batch won the award for the title Battery management system of Electric Vehicle using IoT using IDEATHON.

4th semester students, Danny Johnson P, Pooja V, Varun S, Shashi Kumar Urs H J, Rashmi, Mounashree participated in Smart Hackathon programme held on 23rd march 2022.
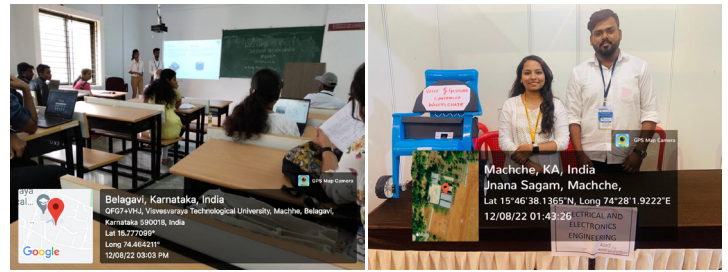
Sahana GH, Roshan S Telagi, Suharsha L, Aishwarya A K, Ashwini M R, Sanjana K G participated in student project programme 45th Series 2022 from KSCST external organization

FACULTY ACHIVEMENTS

FDP/ STTP ORGANIZED

Sl. No.	Title	Date
1	Recent Trends in Electrical Engineering	12th July 2021
2	Recent Trends in VLSI technologies an Automotive Perspective	13th July 2021
3	EV and Its Effect on Smart Grid	14th July 2021
4	Introduction to Solar PV Systems	15th July 2021
5	MEMS devices in Real World Applications	16th July 2021
6	Embedded System Challenges and Electrical Applications in Automotive	17th July 2021

Glimpse of FDP organised

FDP/STTP ATTENDED

1. Faculty Development Program on "Recent Advances in Electrical Vehicle Technology" attended by Dr Devi Vigneshwari from 18th Oct 2021 to 23rd Oct 2021.

2. Faculty Development Program on "Recent Trends in Electrical Engineering" attended by Dr Devi Vigneshwari from 12th July 2021 to 17th July 2021.

3. Faculty Development Program on "AICTE Students Learning Assessment STTP"attended by Prof Nisha C Rani and Dr Devi Vighneswari from 30th April 2022 to 14th May 2022.

4. International Conference on Engineering Innovation (ICEI-2022) on "Power Loss Electrical Thermal Behavior in EV Drivetrain System" attended by Dr Devi Vigneshwari on 3rd June 2022.

5. International Conference on Engineering Innovation (ICEI-2022) on "Seven Level Multilevel Inverter with Reduced Switches using Novel Design" attended by Prof Jaya Kumar N on 3rd June 2022.

6. One-week online teacher training program on "An overview of Teaching Technique in social connect and responsibilities" attended by Prof Jayakumar N on 7th & 11th March 2022.

7. One-week online LTTP program on "Integration of Renewable sources with power converters" attended by Prof Jaya Kumar N on 6th December to 10th December 2021

8. Prof Jayakumar N has successfully completed "Master class on motor control for EV Application at Pantech Prolabs India Pvt Ltd" on 17th June to 19th June 2021.

9. Faculty Development Program on "Teaching and Learning in Engineering (TALE)" attended by Prof Nisha C Rani from Jan-Feb 2022.

10. Faculty Development Program on "Recent Trends in Electrical Engineering" attended by prof Nisha C Rani from 12th July 2021 to 17th July 2021.

11. Faculty Development Program on "Advanced reactive power management of power networks" attended by prof Nisha C Rani from July 5th to July 8th 2021.

12. International Conference on Engineering Innovation (ICEI-2022) on "Power Loss Electrical Thermal Behavior in EV Drivetrain System" attended by Prof Sumitha T L on 3rd June 2022.

13. Faculty Development Program on "Inculcating Universal human values in Technical Education organized by AICTE" attended by Prof Sumitha. T.L and Prof Resna S R from 13th Sept 2021 to 17th Sept 2021.

14. Faculty Development Program on "Overview of Teaching Techniques in Innovation & Design Thinking" attended by Prof Resna S R on 27th to 31st December 2021.

15. Faculty Development Program on "Introduction to Smart grid" attended by Prof Resna SR from July-Sept 2021.

BOOK CHAPTER

Prof Jayakumar N, Prof Nisha C Rani, Dr Devi Vighneshwari published book chapter Multilevel Cascaded Boost Converter Fed Multilevel Inverter for Renewable Energy Application" in the Book Entitled "Artificial Intelligence – Based Smart Power Systems", By Wiley Publishers.

PUBLICATIONS

1. Bharath V S, Performance analysis of three phase inverter for minimizing total harmonic distortion using PWM Technique. Volume 7, Issue 6, June 2022

2. Bharath V S, A hybrid anti- Islanding protection scheme for VSM based DG Inverter Volume 11, Issue 7, July 2022

3. Nisha C Rani, Novel soft switching integrated various converters of ZVT-ZCT grid connected PV system, volume 42, Pages 70-78, Sep 2022. https://doi.org/10.1016/j.ref.2022.05.004

4. Jayakumar N, Devi Vighneshwari, B, Nisha C. Rani, A Novel Double Frequency SEPIC Converter with Improved Transient Characteristics and Efficiency, Sep 2021. Doi: 10.1007/s42835-021-00906

5. Devi Vighneshwari, Jayakumar N and Nisha C. Rani, Cascade H Bridge Multilevel Inverter with PWM for Lower THD, EMI & RFI Reduction, Annals of RSCB, Vol 25, Issue 6, May 2021

6. Resna S R, Closed loop control of BLDC motor in air craft for flap angle applications (IJAREEIE) Volume11, Issue 7, July 2022

7. Nisha C Rani, DC-AC-DC Converter for Renewable Energy Application (IJAREEIE), Volume11, Issue 7, July 2022

8. Jayakumar N and Dr Someswari T, Seven level multilevel inverter with reduced switches in International Journal for recent trends and Innovations Volume 7, Issue 6, June 2022.

9. Devi Vighneshwari B, Sumitha T L, Power Loss electrical thermal behavior in EV Drive train system Volume 7, Issue 6, June 2022.

PATENTS

1. Dr Bharath V S Published a patent on analysis and Comparison of UPQC based on neuro fuzzy based SVPWM Controller. Patent No:202241021212 A, Dated 3 June 2022.

2. Prof Jayakumar N, Prof Nisha C Rani, Dr Devi Vighneshwari Published a patent on AI-Techniques applied IOT monitored vertical gardening system, Patent No: 202241042002, Dated 22 July 2022.

DEPARTMENT OF BIOTECHNOLOGY

VISION

Aspiring to be recognized as a premier source of outstanding graduates, who in turn will help their enterprise attain and sustain industrial and societal competitiveness.

MISSION

To create and disseminate knowledge by being accountable for developing and motivating our pupils to attain academic excellence and industrial competency. With our focus on teaching, learning & research, we engage in helping our students to face challenges in the field of Biotechnology.

ABOUT THE DEPARTMENT

Biotechnology Engineering is a multi-disciplinary branch having applications in multiple fields including Health care, Agriculture, Food Industry and Environmental issues. This rapidly advancing branch was initiated in our college in the year 2003. Since then, the department is growing vertically in terms of Academics, Research, Co-Curricular and Extracurricular activities facilitating the all-round growth of students. The department is affiliated to VTU and has been accredited by National Board of Accreditation for a period of 3 years up to June 2025. The department has bagged 2nd 7th, & 9th VTU ranks. The department has excellent infrastructure for Research

& Development involving well maintained classrooms and highly equipped laboratories which are designed for today's technological challenges. Department has highly qualified faculties with Doctorate. Department has 5 publications in reputed international journal, 3 patents and 3 products to its credit during the academic year 2021-22. The department has received financial assistance from reputed funding agencies viz., VTU, VGST, AICTE, DRDO-NRB, DAE-BRNS, DBT-BIRAC, NIF.

HOD'S PROFILE

Dr. B. K. Manjunatha, presently working as Professor & Head, Department of Biotechnology, The Oxford College of Engineering. He is instrumental in initiating research culture in the department and established well equipped Research lab with financial assistance from various state and central funding Organizations. His research ideas reflecting societal problems and Industry need were well appreciated by various funding organizations viz; Visvesvaraya Technological University (VTU), National Innovation Foundation (NIF), Department of Atomic Energy-Basic Research in Nuclear Sciences (BRNS), Naval Research Board (NRB), DRDO, AICTE, BIRAC, DBT, KSCST, IISc Bangalore, Vision Group of Science & Technology (VGST) with financial assistance to execute the idea into prototype, a total of 1.35 crores was received till date. His innovation has been submitted for exclusive ownership in the form of patents, to his

credit he has 4 patents. He successfully guided two Ph.D., candidate for the award of Doctoral degree and other two research scholars are pursuing for Ph.D., degree. To his credit, he has Total 68 national and international research papers of high repute journals. His h-index is 18, i10-index is 26 with 1337 citations. He received best research paper award in 2004 by Indian Drug Manufacturers Association and Best researcher award in 2021. He is the Associate Life Member of Society for Free Radical Research, BARC, Mumbai and Member in IEEE-EMB Society. He Successfully conducted various FDP, FITP, STTP, Symposium and webinars viz., DST-TIFAC, KSCST, VTU, AICTE etc.

ACADEMIC ACHIEVEMENTS

Anusha S (1OX17BT004)
2nd rank
CGPA 9.34
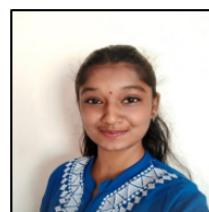
Sumalatha M (1OX17BT041)
7th rank
CGPA 9.09

Saima Jamal (1OX17BT038)
9th rank
CGPA 9.01

GATE 2022 Rank Holders (2018-2022 Batch)

Nandini V (1OX18BT022)
AIR BM: **48** & BT: **3814**

Pavithra P (1OX18BT024)
AIR BT: **222**

Vilas Rao (1OX18BT046)
AIR BT: **1040**

Toppers of 2018-2022 Batch
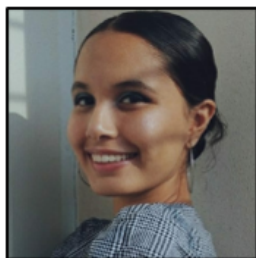
Chaithra Muniyoor (1OX18BT008)
CGPA 9.16

Mohasina Anjum P (1OX18BT020)
CGPA 8.92

Nandini V (1OX18BT022)
CGPA 8.90

Pavithra P (1OX18BT024)
CGPA 8.83

G Deeksha (1OX18BT011)
CGPA 8.79

Performance of 2017-2021 Batch
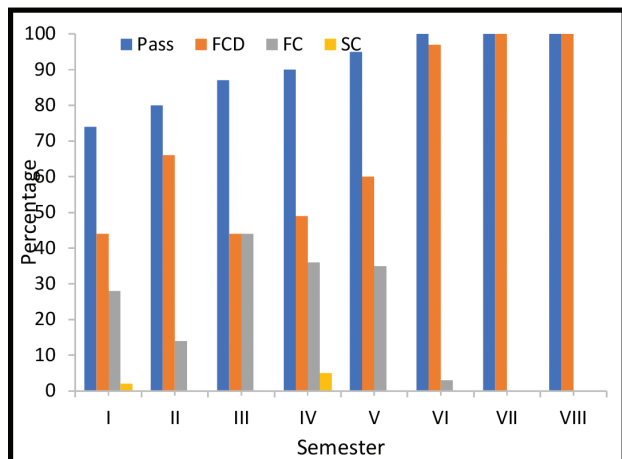
Success rate of 2017-2021 batch is 84%.

Sem	Students appeared	Overall pass %	FCD %	FC %	SC %
	Semester wise Performance Analysis of 2017-21 Batch				
1	43	74	44	28	2
2	41	80	66	14	0
3	39	87	44	44	0
4	39	90	49	36	5
5	37	95	60	35	0
6	37	100	97	3	0
7	37	100	100	0	0
8	37	100	100	0	0
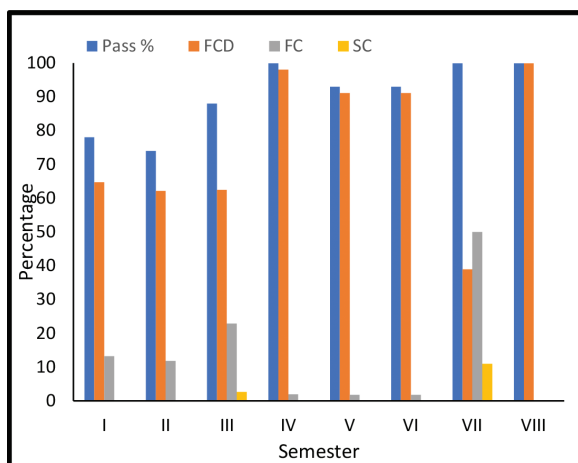
Success rate of 2018-2022 batch is 83%.

Sem	Students appeared	Overall pass %	FCD %	FC %	SC %
Semester wise Performance Analysis of 2018-22 Batch
1	46	78	65	13	0
2	44	74	62	12	0
3	40	88	62	23	3
4	44	100	98	2	0
5	38	93	91	2	0
6	38	93	91	2	0
7	38	100	39	50	11
8	38	100	100	0	0

List of students pursuing higher studies from 2017-2021 batch

Sl.No.	USN	Name	Higher studies Details
1	1OX17BT023	M Purushotham Rao	M. Tech., VTU
2	1OX17BT006	Arpitha K	M. Tech, IIIT, Hyderabad
3	1OX17BT032	Prakashnath	M. Sc., University College Cork, Ireland
4	1OX17BT005	Ardrha Anil	M. Sc., Centre for Human Genetics, Bengaluru
5	1OX17BT002	Akshay V Nair	Integrated Ph. D., IISER, Bhopal

Guest lectures Organized

Sl.No	Date	Title of the Guest Lecture	Resource Person
1.	12-04-2022	Accelerators/Incubation – Opportunities for Students and Faculties – Early-Stage Entrepreneurship	Dr. Anu Appiah K A
2.	04-02-2022	Patent Awareness Program	Mr. Abhishek Singh Dr. Sharan Gouda
3.	04-02-2022	Startup and Innovation: Karnataka Biotechnology Policy for Leveraging Government – Industry – Academia Collaboration to Promote the Sector	Dr. Balasubramanium
4.	13-01-2022	BIG Awareness and A Virtual Field Trip to Bangalore Bioinnovation Centre	Dr. Mary Mangaiyakarasi Ms. Harshitha Choudary
5.	04-01-2022	Copyright, Industrial designs and Trademark 1. Intellectual property rights 2. Copyright, Industrial designs and Trademark	Dr. Prabhavathi Rao Dr. Farah Deeba
6.	26-11-2021	Panel Discussion on Atmanirbhar Bharat-Vocal for Local, Make in India for the World	Col. B. Venkat
7.	25-11-2021	My story –Motivational Session by Successful Innovators	Mr. Sunil Jose
8.	18-11-2021	Patent Databases and Prior Art Search	Dr. Sarasija Padmanabhan
9.	17-11-2021	Geographical Indications: A Significant Property Tool Impacting the Grass roots	Dr. Nandhini Dholepat
10.	17-11-2021	Entrepreneurship and Innovation as career Opportunities	Dr. Vivek Mishra
11.	10-11-2021	Snake Venom Toxicity & Management	Dr. Srimathi R
12.	05-11-2021	Orientation Session on National Education Policy	Dr. H. S. Ravikumar Patil
13.	22-10-2021	My story –Motivational Session by Successful Entrepreneurs/Startup Founder	Dr. Basavarj Giriyannavar
14.	05-10-2021	Problem Solving and Ideation Workshop	Dr. Sarasija Padmanabhan
15.	18-08-2021	BIG Awareness programme 1. Bangalore Bioinnovation Centre 2. Innovation and startup ecosystem at IIT Delhi	Dr. Mary Mangaiyakarasi Ms. Sankriti Pawan
16.	13-08-2021	Building Innovation and Entrepreneurship Ecosystem	Dr. Manpreet Singh Manna

INDUSTRIAL VISIT

Industrial visit to Centre for Human Genetics (CHG)
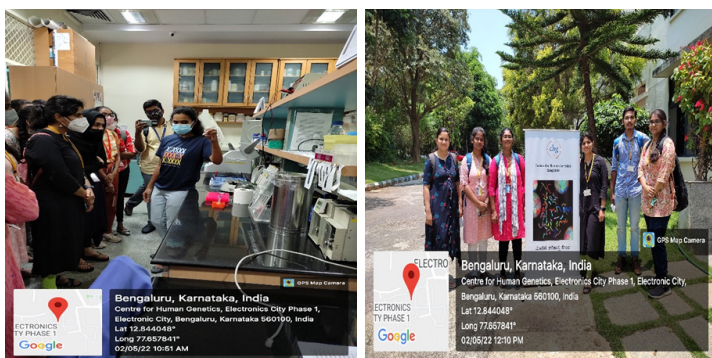
VI semester, B.E Biotechnology Engineering students had been taken to the Centre for Human Genetics, Bengaluru for an industrial visit on 2nd May 2022.

Industrial visit to Bangalore Bioinnovation Centre (BBC)

On 04th July 2022, the IV semester students of B.E, Biotechnology Engineering Visited Bangalore Bioinnovation Center (BBC) for an industrial visit.

Outreach programs organized

Sl. No.	Date	Activity
1	29-05-2022	Blood Donation Camp at Gavipuram
2	28-05-2022	Temple Cleaning at Shri Someshwaraswamy Temple, Madiwala
3	12-05-2022	Oral and Dental Hygiene at TOCE
4	08-05-2022	Spot Fixing at Frazer Town
5	06-03-2022	Government School Beautification at the Government School, Marriyapanapalya, Kengeri
6	26-12-2021	Swach Bharat-Spot fixing and Wall painting at Hosakerehalli main road
7	01-11-2021	Visit to GERIZIM rehabilitation trust, Ejipura Bengaluru
8	26-07-2021	Awareness program on Personal and Public hygiene, Covid-19 related guidelines for FIRE fighters at Electronic city fire station
9	21-07-2021	Awareness program on Delta Plus Virus & Importance of Vaccination at Adigondanahalli, village Bengaluru
10	20-07-2021	Awareness program on public hygiene, Zika virus, Covid & Dengue, at BWSSB, Domlur
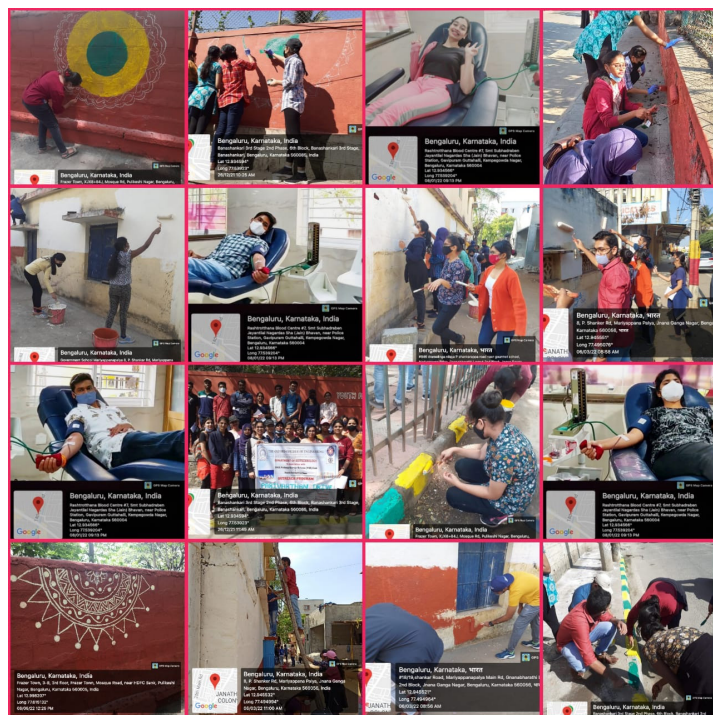
Memorandum of Understanding

During the academic year 2021-2022, the department of Biotechnology has signed MoU with 3 industries for two years namely,

1. Cell Sparx Biotech Llp
2. Fibroheal Woundcare Pvt Ltd
3. LGS Trust

Funded student projects in the academic year 2021-2022

Sl. No.	Title of the project	Student	Guide	Funding Agency
1	Integrated Remediation Strategy for Repurposing of Industrial waste water	Afrah Raihan Debleena Bose Jemima Saji Mohasina Anjum P	Dr Manjunatha B K Dr. Valarmathy K	VTU
2	Invitro and insilico evaluation of anti-quorum sensing of ipriflavone on Pseudomonas Aeruginosa	Samuel Prince Sanjay B R Tejas H N Tejas M	Dr Manjunatha B K	VTU
3	Bioremediation of carcinogenic polycyclic aromatic hydrocarbons (PAHs) rich effluent from petrochemical industries	Pavan D N Hemamalini R M Sai Shruti Kannan Vilas Rao Shinde	Dr Manjunatha B K Pro. Divakara R	KSCST

CONFERENCES/ SEMINAR PRESENTATIONS

1. Bhoomika S N (1OX19BT005), Hepzibah Evangelin P (1OX19BT011), Kavidharshini D (1OX19BT016) and Vismitha R (1OX19BT029) presented their project titled "Vertical Hydroponics" and secured third prize in Project Expo 2022 of NCSEM 2k22.

2. Pavan D N (1OX18BT023), Hemamalini R M (1OX18BT013), Sai Shruti Kannan (1OX18BT032) and Vilas Rao Shinde (1OX18BT046) presented their project titled "Bioremediation of carcinogenic polycyclic aromatic hydrocarbons (PAHs) rich effluent from petrochemical industries" in state level seminar at VTU, Belagavi on 12th and 13th August 2022 in connection with 45th series of student project programmes (SPP) of KSCST.

FACULTY ACHIEVEMENTS

Dr. B. K. Manjunatha received best researcher award in IRESFO 2021

STTP Organized

The Department of Biotechnology of The Oxford College of Engineering organised AICTE sponsored **Short term training program (STTP) in 4**

phases on **"Startup Driven Bioinnovation & IoT for Sustainable Agri-tech",** in association with KSCST (Karnataka state Council for Science and Technology, Government of Karnataka), NRDC (National Research Development Corporation, Government of India, New Delhi), BBC (Bangalore Bioinnovation Centre, Bengaluru) and VTPC (Visvesvaraya Trade Promotion Centre, Department of Industries & Commerce, Government of Karnataka) as knowledge partners for the benefit of all the faculty members across the globe.

FDP Attended

- Dr. B. K. Manjunath, Dr. K. Valarmathy, Dr. Nathiya T, Mr. Divakara R and Ms. Salma Kausar. M. attended Pahse1,2,3 and 4 of the AICTE Sponsored One Week Short Term Training Programme (STTP) on "Startup driven Bio innovation and IOT for Sustainable Agritech' conducted The Oxford College of Engineering, Bangalore.

- Dr. K. Valarmathy and Dr. Indulekha John attended 10 days Idea to patent course from 30th May to 8th June 2022 0rganized by Turnip Innovations.

- Dr. K. Valarmathy and Dr. Indulekha John attended 10 days Patent Analytics course from 26th May 2022 to 4th May organized by Turnip Innovations.

- Dr. K. Valarmathy, Ms. Salma Kausar M and Dr. Indulekha John attended UGC-AICTE online FDP on Universal Human Values from 11th to 15th July, 2022.

FACULTY PUBLICATIONS

1. B.K. Manjunatha, Immunomodulatory and radioprotective property of glucans isolated from lactobacillus species, Bioactive Carbohydrates and Dietary Fibre, 2022, 27, 100304.

2. Salma Kausar M, B.K. Manjunatha, In-vitro Study of Macelignan as a Potential Anticancer Drug against Colorectal Cancer using HCT116 Cell Line, Journal of Clinical & Diagnostic research,2022, 16(1), KC01-07.

3. K. Valarmathy, B. K. Manjunatha, Relationship between microbial biomass and extracellular enzymes: a study of Pachamalai forested streams, Natural Volatiles & Essential Oils, 2021, 8,5171-5182.

4. Salma Kausar M, B.K. Manjunatha, Molecular Docking of Macelignan a polyphenolic derivative isolated from L. aspera & L. cephalotes on colorectal cancer receptor and its ADMET prediction, Paripex-Indian Journal of Research,2021, 10(12), 1-5.

5. Salma Kausar M, B.K. Manjunatha, Synthesis of Silver Nanoparticle Using Bioactive Phenolic Compound Extracts of Leucas aspera and Leucas cephalotes and Evaluation of its Antibacterial Activity, Asian Journal of Organic & Medicinal Chemistry,2021,4(4), 310-314.

BOOKS PUBLISHED

1. Dr. K. Valarmathy. Renewable energy resources ISBN No: 9798887174471, Notion Press, published on 02-06-2022.

RESEARCH AND DEVELOPMENT

The Department is doing outstanding research work in VTU approved Research and Development (R&D) Centre. The department has established unique research facilities, viz., Centre for Natural Product Research (With financial assistance from VTU; AICTE, New Delhi & DAE-BRNS, DRDO, New Delhi); Centre for Computational Medicinal Chemistry in Drug Discovery (with financial assistance from Vision Group of Science and Technology, Govt. of Karnataka) and Centre for Bioremediation (With financial assistance from Naval Research Board, DRDO, New Delhi & DBT-BIRAC, New Delhi).

PATENTS

1. Dr. B. K. Manjunath, and Dr. K. Valarmathy. "An Integrated System of Image Recognition Along with Artificial Intelligence for Accurate Prediction of Lung Cancer Using Various Medical Modalities" Patent application number: 202241020244, Patent applied on 04/04/2022 and published on 13/05/2022.

2. Dr. B K Manjunath, Divakara R, Sushma Bhandarkar and Kunalika M H. "Herbal water formulation and method of preparation thereof" Patent application number: 202241034985, Patent applied on 18/06/2022.

3. Dr. B K Manjunath, and Dr. Praveen Kumar S V. "Bioremediation of Oil and Method Thereof" Patent application number: 202241034983, Patent applied on 18/06/2022.

PRODUCTS DEVELOPED

PETROZAP   AYUR AQUA

- Petrozap - A Bioremediation Formulation with Financial Assistance from DRDO-NRB & BDT BIRAC, Govt of India.
- Ayur aqua - A Unique Aqua product blended with natural essential oil to enrich water and to offer health benefit.

FUNDED PROJECTS

Dr. B. K. Manjunatha received Rs. 40,00,000/- for the project titled "Efficient bioremediation tool for hydrocarbon contamination management, scale up and pilot scale study" from Biotechnology Industry Research Assistance Council (BIRAC), Department of Biotechnology (DBT), Government of India.

Dr. B. K. Manjunatha received Rs. 4,41,331/- Nanotisation of Herbal drugs from National Innovation Foundation, Ahmedabad. Govt of India.

DEPARTMENT OF MECHANICAL ENGINEERING

VISION

To become the center of excellence to provide the state-of-the-art engineering education in mechanical engineering and making individual to be capable of building nation in the new millennium.

MISSION

- **M1:** To provide excellent teaching and learning process for the students to meet the current needs and standards of the industries and higher learning process.
- **M2:** To promote research and development activity in the recent emerging trends of mechanical engineering branch.
- **M3:** To provide the students with good communication skill, lifelong learning, team spirit and leadership qualities to face the current society.

ABOUT THE DEPARTMENT

The department of Mechanical Engineering in The Oxford College of Engineering is a flagship department of the college. The department was started in the year 2002, and since then the department has been buzzing with activities viz., seminars, workshops, technical quiz, invited guest lectures, industrial visits, conferences etc., that enhance the employability of our students. The faculties of the department are cherry-picked and they are experts in their own field. The students admitted in the department are well trained both theoretically and practically to face the real world. Industry internship has been made compulsory for all the students. At the end of four years of study, the students are made industry-ready to take the bull by the horn. Also, many graduates from the department have acquired higher degrees from reputed universities at abroad. The alumni of the department are spread all over the world contributing significantly for the well-fare of the humanity. The students of the department have brought laurels to the institution by winning many medals at the university and state level sports competitions. The students are encouraged to participate in co-curricular activities and competitions.

HOD'S PROFILE

Dr. Madhu Sudana Reddy G working as a professor and Head of the Department in Mechanical Engineering. He has graduated his M. Tech (Materials/ Manufacturing Science) from the M.S. Ramaiah institute of Technology in the year 2008.He has completed his Doctor of Philosophy in the year 2019 on the area of Thermal spray coatings/ Composite Materials under the guidance of Dr.M.R. Ramesh, Professor, Dept of Mechanical Engg, NITK Surathkal, Karnataka and Dr. Nageswara Rao.T, Director, Gitam University, Bangalore, Karnataka. He has more than 14 years of teaching and 2 years of industrial experience. His area of research is on thermal spray coatings, composite materials, PMCs and MMCs. He has several research publications in reputed SCI/Scopus indexed journals. He is currently working under the Research project entitled as" Studies on Hot corrosion and erosion behavior of thermally sprayed composite coating for high temperature industrial Application" under VTU Research Grant Scheme. He is professional member in various professional bodies like Indian society of technical education, Institute of Engineers, Indian institute of Metals, Materials Research society of India, Institute of Research & doctors, and International Association of Engineers. He is currently the BOE member in the Automobile Engineering board and Research Supervisor in the Faculty of Mechanical Engineering Sciences, Visvesvaraya Technological University (VTU) Belagavi.

ACADEMIC ACHIEVEMENTS
Student Toppers List

Bhargav Reddy
1OX18ME011
CGPA: 8.4

Mr. Naveen Kumar Jaishwal
1OX18ME034
CGPA=8.25

Mr. Mohammad Sameer Sunkad
10X18ME031
CGPA=7.5

Mr. Tharun Kumar K
1OX18ME051
CGPA =7.4

Harshith M
10X18ME016
CGPA = 7.2

Performance of passed out batch (2017-2021) students
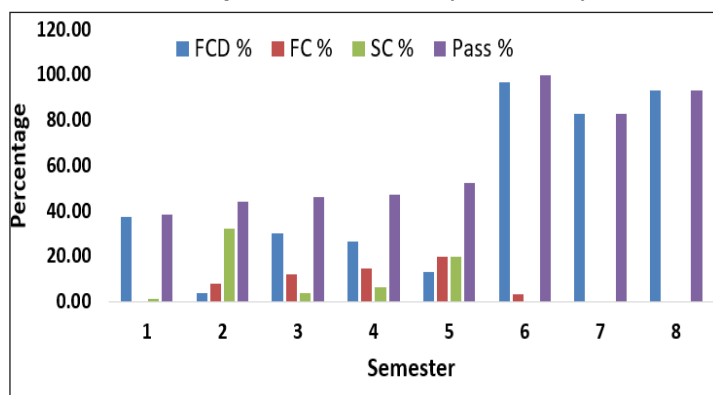
Success rate of 2017-2021 batch is 93%.

Performance of passed out batch (2018-2022) students
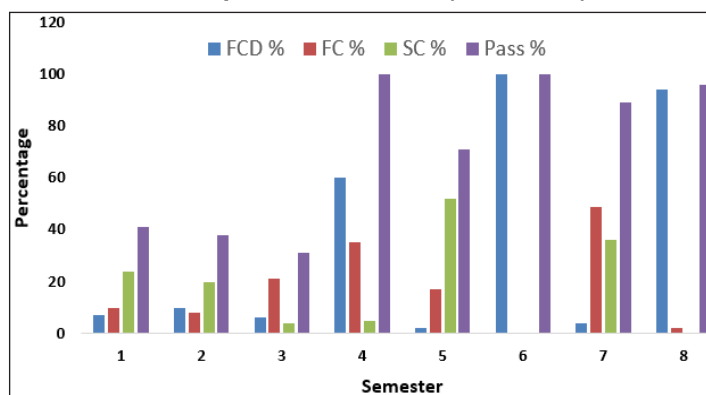
Success rate of 2018-2022 batch is 76%.

Semester wise Performance Analysis of 2017-21 Batch					
Sem	Students appeared	Overall pass %	FCD %	FC %	SC %
1	75	39	38	0	1
2	75	44	4	8	32
3	76	46	30	12	4
4	76	47	26	14	7
5	61	52	12	20	20
6	63	100	97	3	0
7	76	83	83	0	0
8	75	93	93	0	0

Semester wise Performance Analysis of 2018-22 Batch					
Sem	Students appeared	Overall pass %	FCD %	FC %	SC %
1	59	41	7	10	24
2	59	38	19	8	20
3	48	31	6	21	4
4	48	100	60	35	5
5	46	71	2	17	52
6	46	100	100	0	0
7	47	89	4	49	36
8	47	96	94	2	0

STUDENT ACHIEVEMENTS

1. Mr. Naveen Kumar Jaishwal of final year has won the competition in National Level Hackathon in the domain of Medical Device Technology which was organized at Dr Ambedkar Institute of Technology, Bangalore

2. Mr. Naveen Kumar Jaishwal of final year has won the internal SIH National level Hackathon in Medical Device Technology, which was conducted at The Oxford College of Engineering, Bangalore

3. Mr. Naveen Kumar Jaishwal of 8th semester student has won the first prize in the project competition in VTU – Education Conclave for the project titled "Human Bite Force Measurement" under the mentorship of Mr. Anup M Upadhyaya.

National Energy Conservation Day was conducted on 14th December 2021. Mr. JayaKumar, Assistant Professor from the Department of Electrical and Electronics Engineering, TOCE was the resource person.

4. Mr. Rajesh Ponnappa, Alumni of the Mechanical Engineering Department bagged All India 222 rank in the UPSC 2021.

5. Mr. Prajwal P Patil got selected for the "Photonic Engineering" Master's Degree in one of the top reputed University, Ghent University, Belgium. Mr. Prajwal worked under the mentorship of Dr. Preeta Sharan and Mr. Anup M Upadhyaya. Management, Principal and HOD - Dr Madhu Sudana Reddy G has congratulated the student for his achievement.

Mechanical Software training program has been organized for staffs and students for about days on 9th and 10th June 2022in the Department of Mechanical Engineering, The Oxford College of Engineering, Bangalore, India. This is in association with VTU-ALTEM Technologies. Mr. Manohar from ALTEM Technologies trained the students and staffs on ALTEM mechanical software.

Funded student projects in the academic year 2021-2022

Sl. No	Title of Project	Students	Guide	Funding Agency
1	Real-time pressure monitoring system using FBG sensor for sports and rehabilitation applications	Avaniesh Sreejith Marthanda Rao Kiran K S Chandan M	Anup M Upadhyaya	VTU
2	Design and realization of 3d printed pulse monitoring probes	Harshith D Ranjith Kumar V J Jackson Bharath Kumar S	Anup M Upadhyaya	KSCST
3	Design and development of 3d printed bite force monitoring device for dental application	Naveen Kumar Jasihwal Bhargav Reddy Shreyas D Amith Kumar H P	Anup M Upadhyaya	KSCST

Department of Mechanical Engineering, The Oxford college of Engineering, Bangalore has organized the industrial visit to the Indian Space Research Organization (ISRO) URSC in Bangalore on 12th April 2022.

Webinars/Guest lectures organized

Sl. No.	Date	Title of guest lecture resource person	Resource Person
1	10-12-2021	Overview on advanced material	Dr P Sampath Kumaran, Joint Director and Head MTD, CPRI
2	28-12-2021	Design thinking, Critical Thinking and Innovation Design	Dr Preeta Sharan, Professor, ECE Department, TOCE
3	10-05-2022	Development of Behavioural Aspects of Entrepreneurship	Dr. Nageswara Rao A, Professor, CMR Institute of Technology
4	21-06-2022	session on innovation/ prototype validation-converting innovation into startup or session on achieving value proposition fit and business fit	Mr. Sandip Kumar Roy, Executive Vice President, IDM Technologies, Dubai, United Arab Emirates
5	11-07-2022	Design thinking with entrepreneur spirit	Prof Anju Das, Professor, Dept of Electrical and Electronics, CMR Institute of Technology

Glimpses of Guest Lecture/Webinar Organized

Outreach Activities

Sl.No.	Date	Activity
1	26-07-2021	Swachh bharat – go green initiative
2	27-07-2021	Traffic Awareness Programme
3	09-07-2021	the Sound Awareness Programme
4	12-07-2021	Utilization of Non-Conventional Energy Resources
5	02-06-2022	No Plastic Awareness Programme

Glimpses of Outreach activities conducted

Cultural Activities

Department of Mechanical Engineering, The Oxford College of Engineering organized Farewell program for 2018 batch final year students on 26th July 2022. All students and faculties have participated in this event.

FACULTY ACHIEVEMENTS

Dr. Madhu Sudana Reddy G awarded as "Best Researcher" by Dr. Satish.V. Kailas, Professor, Mechanical Engineering from Indian Institute of Science, Bangalore at Indian Excellence award function (IRESFO-2021).

FACULTY PUBLICATIONS

1. M. Raviprakash, Synthesis of nanostructured ternary Ti based alloy for bio-medical applications, Materials Today: Proceedings, Volume 54, Part 2,2022, Pages 372-377, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2021.09.429.

2. M. Raviprakash, Microstructural characterization and wear behavior of 12 wt% of boron carbide reinforced Al2030 alloy composites, Materials Today: Proceedings, Volume 52, Part 3.

   2022, Pages 439-444, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2021.09.098.

3. Dr. Madhu Sudana Reddy G, Solid Particle Erosion Behavior of Plasma-Sprayed (WC–Co)/(Cr3C2–NiCr) Coatings. Journal of Bio and Tribo Corrosion, Springer publications, Volume 8,40 (2022). https://doi.org/10.1007/s40735-022-00629-5.

4. Dr. Madhu Sudana Reddy G, Elevated Temperature Erosion Performance of Plasma Sprayed NiCrAlY/TiO2 Coating on MDN 420 Steel Substrate. Surface Topography Metrology and Properties, Volume 10,2022,1088/2051-672X/ac6a6e.

5. Dr. Madhu Sudana Reddy, (2022). High-temperature oxidation behavior of plasma-sprayed NiCrAlY/TiO 2 and NiCrAlY/Cr 2 O 3/ YSZ coatings on titanium alloy. Welding in the World, Springer publications, Volume66,10.1007/s40194-022-01268-7.

6. Dr. Madhu Sudana Reddy G, (2022). Article Fabrication of Mg-Zn/ Al and Mg-Zn/Anodized Al Multilayered Composites by Accumulative Roll Bonding, Investigation of Corrosion Behavior, Volume 4, Issue 1, Materials International. 10.33263/Materials41.003.

7. Dr. Madhu Sudana Reddy G, High-Temperature Oxidation Studies of Plasma-Sprayed NiCrAlY/TiO2 and NiCrAlY/Cr2O3/YSZ Cermet Composite Coatings on MDN-420 Special Steel Alloy. Metallography & Micro strucutre, Springer publications, Volume 10, Pages 642–651. https://doi.org/10.1007/s13632-021-00784-0.

8. Dr. Madhu Sudana Reddy G, Investigation of thermally sprayed NiCrAlY/TiO2 and NiCrAlY/Cr2O3/YSZ Cermet Composite Coatings on titanium alloys, Engineering Research Express, Volume 4, Number 2,2022, https://doi.org/10.1088/2631-8695/ac7946.

9. Mr. Anup M Upadhyaya "Micro-opto-electro-mechanical system based micro-cantilever sensor for bio-sensing applications," J. Opt. Soc. Am. B 39, 1736-1742 (2022).

10. Mr. Anup M Upadhyaya, Design and analysis of photonic MEMS based micro ring resonators for pressure sensing application in Journal of Micromechanics and Micro-engineering during 2021 ,31. 115004. 10.1088/1361-6439/ac2bb1.

BOOK PUBLICATIONS

1. Anup M Upadhyaya published book chapter on "Photonic MEMS Sensor for Biomedical Applications" in Computational Health Informatics for Biomedical Applications, ISBN: 9781774912539, 2022.

RESEARCH AND DEVELOPMENT

PATENTS

1. Dr. Madhu Sudana Reddy G published an Indian patent titled "Design and development of automatic gear changing model using electromagnetic valves" Date of publication 14-07-2021, Patent Number 202141031663.

FUNDS RECEIVED

Dr. Madhu Sudana Reddy G (Principal Investigator) and Mr. Anup M Upadhyaya (Co – Investigator) received Rs 11,00,000/-from VTU-RGS for the project 'Studies on Hot corrosion and erosion behavior of thermally sprayed composite coating for high-temperature industrial Application.

DEPARTMENT OF MECHANICAL ENGINEERING

VISION

To impart very high-quality education to the students to make them do innovative sustainable engineering relevant to industry and people at large.

MISSION

- **M1:** To emphasize on basics of engineering as well as their applications relevant to the industry.
- **M2:** To serve the society with due consideration of economy, ecology and ethical issues of nation.

- **M3:** To sensitize the students and faculty to take up research and consultancy to be on par with international standards.

ABOUT THE DEPARTMENT

The Department of Civil Engineering consists of Following areas of Technical Specialization: Structural Engineering, Highway and Transportation Engineering, Environmental Engineering, water resource and hydraulic engineering, Surveying and Geographical Information System (GIS). In addition, Department is also offering two years Post graduation Program MTech in Structural Engineering and also Ph.D. Program. The Department has Nine laboratories for UG, PG as well as

PhD programs with state of art of the equipment. Keeping ourselves up to date with latest developments in this fast-advancing technical world is important and hence we have a set of dedicated, hardworking faculty team in our department. The Department Continuously strives very hard to provide world class facilities for education and research.

HOD'S PROFILE

Dr. Malleshaiah T.S, presently working as Head of the Department of Civil engineering is holding a Ph.D. degree in Civil Engineering. His specialization is in the area of Water resource and Hydraulics Engineering and obtained his Ph.D. degree from Visvesvaraya Technological University. He has vast experience in teaching. Dr. Malleshaiah, started his career in the teaching field in "The Oxford Educational Institution", as an Assistant professor and he has a career span of more than 30 years in the same institution. He has guided more than 150 students in B.E. final year project work. Also, he has taught the subjects prescribed by the Visvesvaraya Technological university in Civil Engineering Stream of first to fourth year of the course. He has also served duty of being BOE of the university level examinations.

ACADEMIC ACHIEVEMENTS
Student Toppers List (2018-2022 batch)

Student Name	USN	CGPA
Manjunath D N	1OX18CV016	9.6
Mysar Jan	1OX19CV413	9.4
Srushti R	1OX18CV043	9.4
Nishat Fathima	1OX18CV022	9.3

Performance of 2017-2021 Students
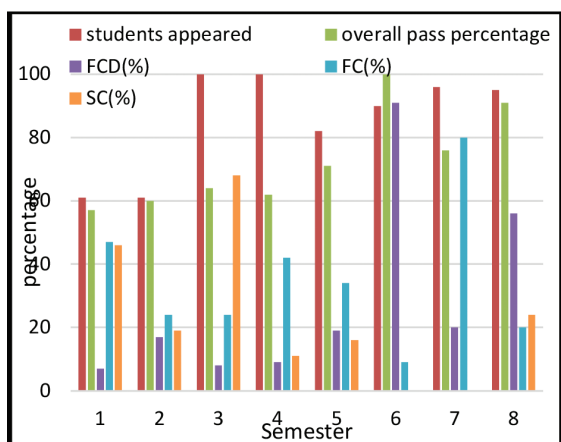
The overall success rate of the batch 2017-2021 is 70%.

Sem	Students appeared	Overall pass %	FCD (%)	FC (%)	SC (%)
1	61	57	7	47	3
2	61	60	17	24	19
3	100	64	8	24	32
4	100	62	9	42	11
5	90	71	8	44	19
6	90	100	91	09	0
7	90	76	8	68	0
8	90	91	20	40	31

Performance of 2018-2022 Students
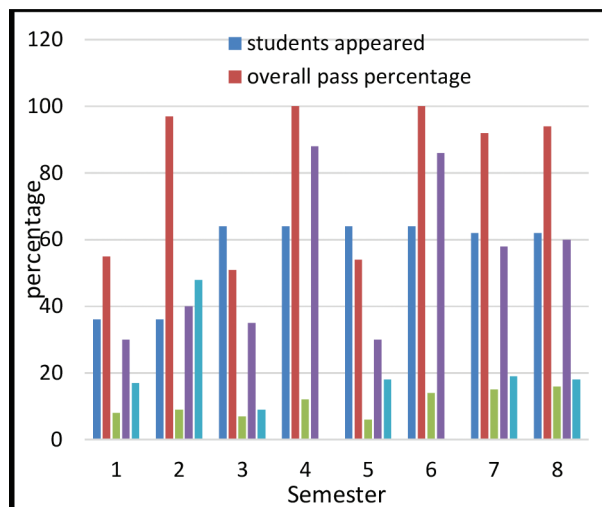
The overall success rate of the batch is 78%.

Sem	Students appeared	Overall pass %	FCD (%)	FC (%)	SC (%)
1	36	55	8	30	17
2	36	97	9	40	48
3	64	51	7	35	9
4	64	100	12	88	0
5	64	54	6	30	18
6	64	100	14	86	0
7	62	92	15	58	19
8	62	94	16	60	18

Content Beyond Syllabus

Conduction of workshop "Design and Think, How to Learn".

Outreach Activities

Sl. No.	Date	Activity
1	23-07-2021	Traffic awareness conducted at Bommanahalli signal junction
2	23-07-2021	Clean India Campaign conducted at Hongasandra Main Road
3	24-07-2021	Plastic Awareness Campaign Around Bommanahalli area
4	27-07-2021	A visit to retirement Home Prasantha Charitable Trust situated at Begur-Bommanahalli Road

Seminars/Webinars Organized

Sl. No.	Date	Title of Guest Lecture	Resource Person
1	12-10-2021	Seminar on, "Being Employable"	Er. Ashok Kumar
3	29-10-2021	Startup Policy – How to start Dream Job.	Er. Girish
2	27-04-2022	Webinar on Intellectual Property Rights and IP management	Mr. Praveen Kumar

Funded Student Projects

Sl. No.	Title Of the Project	Student	Guide	Funding Agency
1	Light transmitting concrete	Mohammed Shafi Dar Sharukh Tabrez Taizeem Mushtaq	Ms. Kavya S K	VTU
2	Green Building for Quality	Aiman Zehra Nishat Fathima Mysar Jan Amjid Showkat	Mrs. Akshata K. B	VTU

Memorandum of Understanding

A MoU has been signed with CMTI, Jayanagar, Bangalore, during the academic year 2021-2022

FACULTY ACHIEVEMENTS

FDP'S ATTENDED

1. Mr. Prashanth Hathwar T. S, attended ATAL FDP on Topic," GIS & Remote sensing and its applications" from 9th August 2021 to 13th August 2021.

2. Mrs. Gayathri R, attended FDP on Topic," Design and construction practices of Bridges" from 30th August 2021 to 3th September 2021, conducted by MITE.

3. Mr. Prashanth Hathwar T. S, Mrs. Gayathri R, attended ATAL FDP on Topic "Earthquake analysis and Design using Latest Civil Engineering Software's" from 18th October 2021 to 22 October 2021.

4. Ms. Kavya S K, attended FDP on Topic "Disaster Management During COVID Crisis" from 16th January 2022 to 18 January 2022, conducted by NIDM, Ministry of Home Affairs, Government of India in collaboration with federation of Indian Chambers of commerce and Industry.

5. Mrs. Gayathri R attended FDP on topic," Resource recovery and reuse: Waste to wealth" from 17th January 2022 to 21st January 2022.

6. Ms. Kavya S K attended FDP on topic," Advance Wastewater Management", from 21st March 2022 to 26th March 2022 conducted by Angadi institute of technology and management.

7. Ms. Kavya S K, Mrs. Gayathri R attended FDP on the topic," Water-A precious Natural Resources" from 22nd March 2022 to 26th March 2022 conducted by Bangalore Institute of Technology, Bangalore.

8. Ms. Kavya S K, attended FDP on Topic," Recent Advances in Civil Engineering Materials and Applications" from 8th April 2022 to 12th April 2022 organized by F.E.T.M.J.P. Rohikhand University, Bareily.

9. Mr. Shivanand C.G, Mr. Prashanth Hathwar T. S, attended AICTE-VTU Joint Teacher's Training program on" Earthquake Resistant Design of Structure"

PUBLICATIONS

1. Shivanand C.G," Effect of lateral load on high rise structure with plan irregularity", International Journal of combined research and development, volume 10, issue 5.

2. Shivanand C.G, P. Prakash, Geetha L, Priyanka, "A Comparative Study of Framed Structure, Frame Tube and Tube in Tube Structures Subjected to Lateral Load Under Zone III and Zone V", International Journal of Research in Engineering and Science, Volume 10 Issue 4, ISSN (Print): 2320-9356.

3. Nagashree G V, Naresh, Sachin R H, Kavya S K, "Evaluation of Municipal Solid Waste as a Source of Electric Power Generation", Journal of Emerging Technologies and Innovative Research (JETIR), Volume 8, Issue 8, ISSN-2349-5162.

RESEARCH & DEVELOPMENT

The thrust areas in Civil Engineering under research areas are-Structural Engineering, Earthquake Engineering, Concrete Technology, Water Resource Engineering, Environment Engineering and various faculties are available under the following area of expertise.

Dr. Amarnath K is recognized as a research supervisor and Mr. Avinash Specialized in structural Engineering is a research scholar under his guidance.

DEPARTMENT OF AUTOMOBILE ENGINEERING

VISION

To establish the department as a renowned centre of excellence in the area of scientific education, research with industrial guidance and exploration of the latest advances in the rapidly changing field of Automobile Engineering.

MISSION

The Department will serve its students, industry and society by fulfilling the mission of learning, and engagement through the creation, dissemination and application of engineering methods. Encourage students to continuously challenge the existing methods in Automobile Engineering with an intention to align the students towards research. Impart knowledge on practical aspects and professional standards relevant to the practice of Automobile Engineering in the many aspects of modern life where it plays a vital role.

ABOUT THE DEPARTMENT

Automobile Engineering is one of the specialized engineering disciplines. The concepts of which the most of the engineers, are rightly reflected by curriculum framed by reputed universities all over the world. The department started with an intake of 60 students in the academic year 2011-2012 and M Tech in Automotive Engineering is added in the year 2014-2015 with an intake of 18 Students.

HOD'S PROFILE

Dr. Raju B R presently working as Professor and Head, Department of Automobile Engineering, The Oxford College of Engineering. He has more than 25 years of teaching and industrial experience, received more than 40 lakhs worth of grant from various funding agencies including AICTE, Govt. of India, New Delhi, VGST, Govt. of Karnataka, VTU, Belgaum and KSCST, IISc, Bangalore. He is the professional life member in the Indian Society for Technical Education (ISTE), New Delhi and he has published 56 research papers in reputed journals and published paper of National-20 and International-36 and guiding for 5 PhD research scholars.He is currently, appointed as BOE-Chairman to the Automobile Engineering Board by VTU Belgaum for the academic year 2021-22, and also appointed as BOS-Chairman to the Automobile Engineering for the CBCS Scheme 2022-2025 by VTU Belagavi and also a member of B.O.E. to the Automobile Engineering for the academic years 2016-2017 and 2018-2019 by VTU Belagavi. He invited as a chair person for various National and International conferences and workshops, and a resource person for FDP's/STPs to various reputed institutions. He organized and conducted 6 AICTE, VTU –VGST and AICTE-ISTE sponsored National level FDPs and STTPs and also went to Karnataka Public Service Commission, Govt of Karnataka as a selection committee member for RTO.

ACADEMIC ACHIEVEMENTS

Outstanding performance: 6 VTU ranks were bagged by our students of the 2017-2021.

Shashank Naik
1OX17AU034
2nd Rank, CGPA 9.32

Md. Mohsin Pasha
1OX17AU017
4th Rank, CGPA 9.25

Chamundi Prasad
1OX17AU007
5th Rank, CGPA 9.21
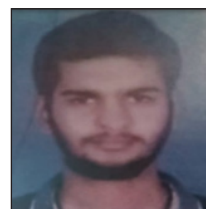
Ansuman Tiwari
1OX17AU004
6th Rank, CGPA 9.15

Mohammed Thameem S
1OX17AU018
9th Rank, CGPA 9.01

Parth S Satpute
1OX17AU016
10th Rank, CGPA 8.9

Toppers List UG Course 2018-2022 Batch

Nikhil Gowda N
(1OX18AU013)
CGPA 9.32

Anil kumar
(1OX18AU002)
CGPA 9.01

Nithin A
(1OX18AU014)
CGPA 8.68

Pranav Chandra
(1OX18AU017)
CGPA 8.57

Teja MH
(1OX18AU024)
CGPA 8.45

Performance of passed out batch (2017-2021) students
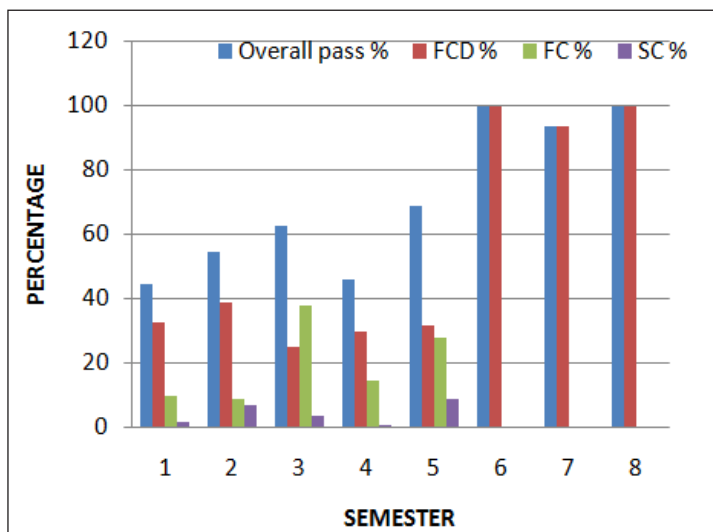
Performance of passed out batch (2018-2022) students
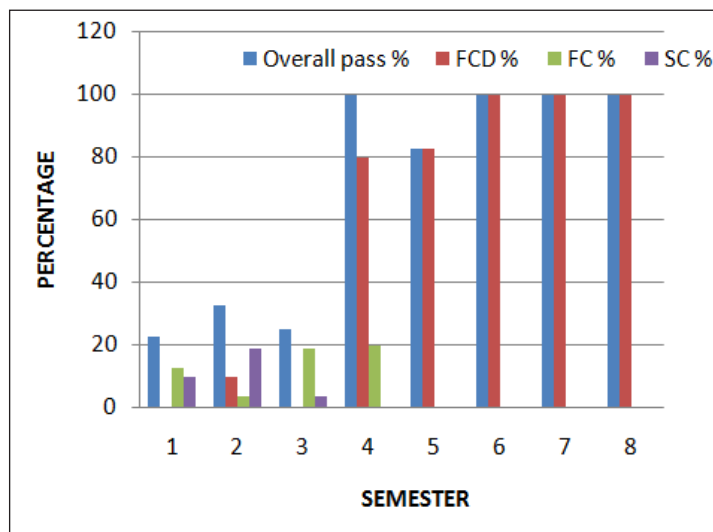
Semester wise Performance Analysis of 2017-21 Batch					
Sem	Students appeared	Overall pass %	FCD %	FC %	SC %
1	42	45	33	10	2
2	42	55	39	9	7
3	40	63	25	38	4
4	40	46	30	15	1
5	38	69	32	28	9
6	38	100	100	0	0
7	33	94	94	0	0
8	33	100	100	0	0

Semester wise Performance Analysis of 2017-21 Batch					
Sem	Students appeared	Overall pass %	FCD %	FC %	SC %
1	26	23	0	13	10
2	24	33	10	4	19
3	29	25	0	19	4
4	29	100	80	20	0
5	29	83	83	0	0
6	29	100	100	0	0
7	2	100	100	0	0
8	29	100	100	0	0

Guest Lectures Organized

Sl.No.	Date	Title of the Guest Lecture	Resource Person
1.	09-09-2021	My Story – Motivational Session by Successful Innovators – Opportunities for Students Early-Stage Entrepreneurship	Mr. Tarun N CEO of FDHIGH Hobbies

STUDENT ACHIEVEMENTS

FUNDED STUDENT PROJECTS

Sl. No.	Title of the project	Student	Guide	Funding Agency
1.	Influence of Nano Fillers on Mechanical and Tribological Properties 0f Fiber Reinforced Hybrid Composites for Automotive Application	Nikhil Gowda N Mohammed Sufyan Sachin U Mohammed Usman	Dr. Raju B R	VTU
2.	Advanced electrical vendor utility vehicle	Nithin A Anil Kumar M Pranav Chandra Praveen P	Mr. Pradeep C	VTU
3.	Design, Fabrication and Performance Evaluation f Hybrid Motor Cycle	Teja M.H Md. Manaam Mayank Rajput Md. Imaduddin	Dr. Raju B R	KSCST

Advanced electrical vendor utility vehicle

Hybrid motor cycle

Conferences/Seminar Presentations

- Building a vertical tower garden by Amrutha, Jashwanth, Muzamil pasha Students of VI sem & Prof. Pradeep C, Asst. Prof, Dept of Automobile Engineering won 1st prize in IDEATHON.

- Secured 3rd Prize in PROJECT EXPO 2022 national conference on science and engineering as the best project for the year July 2022.

- Project on battery drain management by Danush Naidu, Srinivas, Pavan N , S Dhanush secured 3rd prize in National Conference on Science and Engineering Mmanagement.

Project Expo 2022 **Ideathlon** **National conference**

FACULTY ACHIVEMENTS

FDP ORGANIZED

The department has conducted AICTE-ISTE sponsored FDP/Refresher Program on "Recent Advances in Material Design, Manufacturing, Characterization, Machining, and Applications from 22nd to 28th February 2022.

The AICTE-ISTE sponsored FDP on "Recent Advances in Materials Design, Manufacturing, Characterization, Machining & Application" inaugurated by Dr. B.E. Rangaswamy Registrar (Evaluation), VTU Belagavi and Dr. Raju B R, FDP Co-coordinator gave welcome speech to all the participants on 22nd Feb. 2022. Total 50 participants were attended the programme and gained the knowledge in the field of material design and manufacturing and characterization in which 20 outside participants and 30 internal participants were attended. The sessions were handled by the various subject experts and details of talks are enclosed in the programme schedule. At talk on Growth Through Innovation and New Product Development by resource person Dr. K N Subramanya, Principal, R V College of Engineering, Bengaluru and Internet of Things resource person by Dr. Shanmukha Nagaraj, Professor RVCE Bangalore.

Faculty Publications

- 1. B. R. Raju, G. R, A Novel Approach to the study "Microstructure, Dislocation Density and Thermal Expansion Behaviour Using Thermo Elastic Models of Zircon Sand Reinforced as Cast ZA-27 Composites" in Journal of Minerals and Materials Characterization and Engineering (JMMCE), Springer, Volume 9, 278-291, 2021.

- 2. B. R. Raju, G, "Investigations on Microstructure and Tensile properties of as-cast ZA-27 Metal matrix Composite Reinforced with Zircon Sand " , Elsevier , Volume-46, Part-17, 7602-7607,2021.

- 3. B. R. Raju, "Mechanical, Wear and Corrosion Properties of Micro Particulates Reinforced ZA-27 Hybrid MMC by Stir casting " Materials , Elsevier , Volume-46, Part-17, 7618-7623,2021.

- 4. B. R. Raju, "Optimization of Tribological Properties of Micro Particulates Reinforced ZA-27 Composites" Recent Advances in Mechanical Engineering proceeded , Springer, 141-155, 2022.

DEPARTMENT OF MECHATRONICS ENGINEERING

VISION

To develop the Mechatronics Department as a leading educational and research program with innovation in the design and development of electro-mechanical systems, intelligent machines and products.

MISSION

- M1: To provide an outstanding education in Mechatronics Engineering with a rich diversity of skills.

- M2: To contribute to the community prosperity through professional services and research.

- M3: To prepare graduates with ability to engage in life-long learning and capable of carrying out engineering practice with competence.

ABOUT THE DEPARTMENT

The Department of Mechatronics Engineering was established in the year 2011, offering B.E. in Mechatronics Engineering with an intake of

60 students. Since its inception, the department is growing vertically in terms of Academics, Research, Co-Curricular and Extracurricular activities facilitating the all-round growth of students. The department is affiliated to VTU and has been accredited by National Board of Accreditation from 2019-2022 and now renewed for the next 3 years up to June 2025. The department has bagged many VTU ranks. The department has well developed laboratory infrastructure which bridges the gap between industry and academia. Industrial automation, Robotics, Automotive Electronics, Mechanical Design, Noise and Vibration are the thrust areas of research. The discipline inculcates the broader spectrum of engineering knowledge to meet the demands of future requirements. To prepare industry ready engineers of future, the department has a right blend of faculty members having expertise in Mechanical, Electronics and Mechatronics engineering disciplines.

The Department has excellent infrastructure involving well maintained classrooms and highly equipped laboratories which are designed for today's technological challenges. The Department is doing outstanding research work in VTU approved Research and Development (R&D) Centre.

HOD'S PROFILE

Dr. Manjula C presently working as Associate Professor & Head, Department of Mechatronics Engineering at The Oxford College of Engineering. She has completed her Ph.D from VTU in the year 2021. She has published 6 research papers in national and international journals. She has proved to be a good organizer by organizing several Conferences, FDPs, Workshops, Project Exhibitions, Technical Fests sponsored by various professional bodies. She has worked for various Accreditation bodies for the recognition of the Department. She has worked under various capacities in teaching profession and is actively involved in research.

ACADEMIC ACHIEVEMENTS

VTU Rank Holders

Shreya Biradar G
(1OX17MT035)
4th rank

Vijayalakshmi
(1OX17MT042)
8th rank

Sanjay R
(1OX17MT033)
10th rank

Toppers of Mechatronics Engineering (2018-2022 Batch)

Sahana S R
(1OX18MT025)
9.23 CGPA

Rakesh N R
(1OX19MT416)
8.99 CGPA

Veeresh Danappa Chikkodi
(1OX18MT033)
8.35 CGPA

Skanda Narayan J
(1OX18MT029)
8.27 CGPA

Ranjitha V
(1OX18MT024)
8.25 CGPA

Performance of 2017-2021 Batch
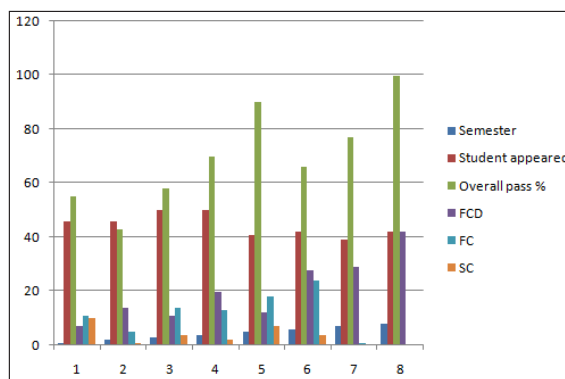
Passed out Batch of 2021 pass percentage is 70%.

Sem	Students appeared	Overall pass %	FCD	FC	SC
1	46	55	7	11	10
2	46	43	14	5	1
3	50	58	11	14	4
4	50	70	20	13	2
5	41	90	12	18	7
6	42	66	28	24	4
7	39	77	29	1	0
8	42	100	42	0	0

Performance of 2018-2022 Batch
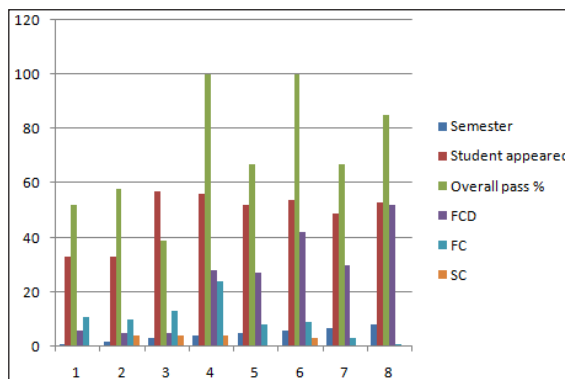
Passed out Batch of 2022 pass percentage is 71%.

Sem	Students appeared	Overall pass %	FCD	FC	SC
1	33	52	6	11	0
2	33	58	5	10	4
3	57	39	5	13	4
4	56	100	28	24	4
5	52	67	27	8	0
6	54	100	42	9	3
7	49	67	30	3	0
8	53	85	52	1	0

List of students pursuing higher studies from 2017-2021 Batch

Sl.No.	USN	NAME	Higher studies details
1.	Aman Raj	1OX17MT007	IIMC
2.	Brundha J	1OX17MT010	Amrita Vishwavidya Peetam

Guest Lectures/Webinars Organized in 2021-2022

Sl. No.	Date	Title of the Guest Lecture	Resource Person
1.	10th May 2022	Innovative Ideas for the Startup	Dr. Preeta Sharan
2.	26th April 2022	Industrial Robotics and Automation with industry 4.0/IIOT	Mr. Nandha Gopal G
3.	27th April 2022	Intellectual Property Rights and IP Management for Start-up	Mr. Praveen Kumar T. N
4.	04th January 2022	Copyrights, Industrial design and Trademarks	Smt. Prabhavathi Rao and Farah Deeba
5.	18th July 2022	Lean Start-up & Minimum Viable Product/Business-Boot Camp	Mr. Karthik N
6.	19th July 2022	Entrepreneurship Awareness on AI and IOT	Dr. Nethravathi B

Industrial Visit
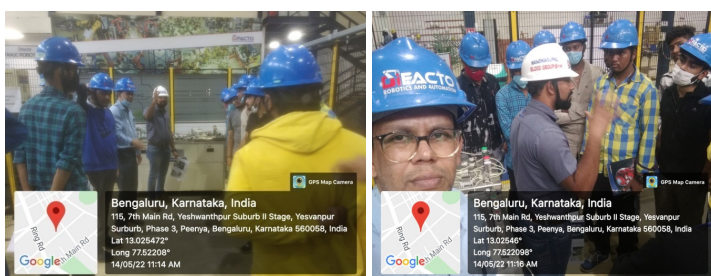
Industrial visit to Difacto Robotics and Automation, Bangalore was conducted on 16nd May 2022 for the Mechatronics Engineering students of 2022 batch.

Outreach programs organized

Sl. No.	Date	Activity
1.	20-7-2021	An outreach programme on "Visit to Old Age Home" was organized by 4th & 6th semester students of Department of Mechatronics at Mother Destitute Home, #5, Nanjappa Layout, 3rd Cross Road, Narayanapurra, Bengaluru, Karnataka 560077.
2.	19-7-2021	An outreach programme on "Covid-19 Awareness Programme" was organized by 4th & 6th semester students of Department of Mechatronics at 47 Main Road Muni Reddy Layout, Hongasandra Bus Stop Bangalore. The main aim of this awareness programme is to create awareness to maximum number of people to stay safe form the transmission and spread of corona virus (COVID-19).
3.	26-6-2022	Our Current VI semester students of Mechatronics Department participated in the sweeping and painting the walls of KR Circle (Parivarthan Drive) as a part of Swachh Bharat Abhiyan on 26/6/2022.

Memorandum of Understanding

During the academic year 2021-2022, the Department of Mechatronics Engineering has signed MOU with 3 industries for two years namely,

1. VI Solution.
2. KGTTI (Karnataka German Technical Training Institute).
3. GTTC (Government Tool room & Training Center).

STUDENTS ACHIEVEMENTS

Our students Arvind M.S, Deon Gomes, Skanda Narayan J, Dheeraj V of current VIII semester Mechatronics Department Participated in the Project Expo-2022, a national level technology exhibition platform organized by The Oxford College of Engineering on July 01-2022 and got 3 prize for their project titled "SMART WALKING STICK".

VTU and KSCST funded Students projects 2021-2022

Sl.No.	Title of the project	Students	GUIDE	Funding Agency
1	Smart portable Bio-mechanical patient monitoring ventilator	Mr. Sandeep H Ms. Ranjitha V	Mr. Jaideep R	KSCST
2	Humanoid robot with three gripper end effector	Ms. Varshadhare K Mr. Anniesh D K Ms. Brundha J Ms. Shreya Biradar G	Mrs. Seema V	KSCST
3	Robotic fish for underwater surveillance	Ms. Vijayalakshmi S Ms. Deshna Mohanty	Dr. Yashoda B S	VTU
4	Hydro Agro	Mr. Aman Raj Mr. Vishnu K Mr. Sanjay R Mr. Vishnukumar	Dr. Yashoda B S	VTU
5	Sign language interpreter for deaf and dumb people using lab-view	Mr. Vishnu Manohar Tumsi S Mr. Kiran S Mr. Sanjay J		

FACULTY ACHIEVEMENTS

FDP Attended by Faculties

1. Dr. Manjula C, attended a FDP titled "recent advances in material design, manufacturing, characterization, machining, and applications" during 22/02/2022 to 28/02/2022 organised by TOCE.

2. Syed firozuddin, attended a FDP titled "recent advances in material design, manufacturing, characterization, machining, and applications" during 22/02/2022 to 28/02/2022 organised by TOCE.

3. Seema V attended a FDP titled "recent advances in material design, manufacturing, characterization, machining, and applications" during 22/02/2022 to 28/02/2022 organised by TOCE.

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

VISION

To Produce Technocrats with Creative Technical Knowledge in the area of Artificial Intelligence & Machine Learning to Excel in the Highly demanding World.

MISSION

- To Deliver Quality Education through Modern Teaching Pedagogy at par with the Industrial Standards using the best of infrastructure.
- To Impart Theoretical, Computational and Practical Knowledge in the area of Artificial Intelligence and Machine Learning.
- To Produce Graduates as an Entrepreneurial and Socially responsible professionals with ethical and moral values.

ABOUT THE DEPARTMENT

We started our journey in the year of 2021, with Artificial Intelligence and Machine Learning Engineering. The primary focus of the course is to promote young engineers as frontiers in the field of Artificial Intelligence and Machine Learning (AI&ML), with problem-solving skills and innovation of new technologies. The 4-year full-time program presents exposure to hands-on technologies to create applications and solutions for the world that we live in.

This Program is designed to enable students to build Intelligent Machines, Software Applications with a cutting-edge combination of Machine Learning, Analytics and Visualization Technologies. There are many applications for Artificial Intelligence & Machine Learning, such as social media, healthcare, e-commerce, weather forecast, traffic monitoring, text mining, robotics etc. There is a huge demand for professionals in the field of Artificial Intelligence, Data Analytics, Data Mining, Machine Learning or Deep Learning and data science in the near future.

HOD'S PROFILE

Dr. P. Bindhu Madhavi is a doctorate from Srikrishna Devaraya University, Anantapur, post-graduation from Acharya Nagarjuna University and Graduation from Jawaharlal Nehru Technological University, Andhra Pradesh. She has a book on Computer Graphics & Visualization and published several research papers in various National and International Journals (Scopus, Web of Science and SCI). She published two patents during 2021-22. She is also been recognized with "Best Research Paper award" by reputed International Publishers, organized many FDPs, workshops and trainings. She also organized many Conferences, FDPs, Workshops and Project Exhibitions Technical Fests. She worked under various capacities under teaching profession and is actively involved in research and received a fund for consultancy project. Her area of research

includes Computer Networks, Image Processing & Artificial Intelligence. Currently she is guiding 3 Research Scholars under VTU University. The BE project batches guided by her titled "Performance Evaluation of a Metropolitan Air Pollution Sensing System based on Prototype Design" and IOT Based Night Patrolling Robot Using Multi Model Neural Network had been selected for KSCST for the years 2017-18 and 2021-22. She is a Life Member of ISTE, BOE member and BOS Invitee of VTU. She also served as a SPOC for SIH and IIC Convener in TOCE, Bangalore.

ACADEMIC ACHIEVEMENTS
Toppers list (2021-2026 Batch)

Punith Kumar K S
(1OX21AI030)
CGPA: 9.61

Sumith Sigitia
(1OX21AI039)
CGPA: 9.31

Namitha G Gowda
(1OX21AI022)
CGPA: 9.29

Naveen N
(1OX21AI023)
CGPA: 9.04

Krithika Kashyap
(1OX21AI014)
CGPA: 8.94

STUDENT ACHIEVEMENTS
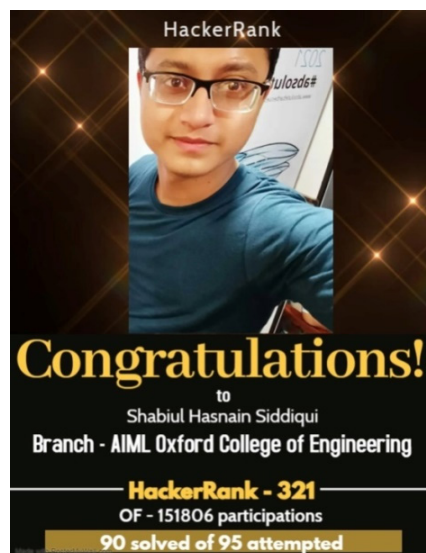
Shabiul Hasnain Siddiqui of II sem AIML has perfectly solved 90 challenges out of 95 attempted in Project Euler+. His rank is 321 across Global and 192 across the country.

FACULTY ACHIEVEMENTS

PARTICIPATION IN WEBINAR

1. Dr. P. Bindhu Madhavi has participated in a webinar on "Startup Opportunities for Photonics Industry" on 16th July, 2022 at TOCE, Bangalore.

2. Dr. P. Bindhu Madhavi has participated in a training program on "IP Awareness" from 21st to 26th April, 2022 at IP Office, India.

3. Dr. P. Bindhu Madhavi has participated in a webinar on ''Familiarization of SAP for Entrepreneurship as A Career Opportunity" on 5thFebruary, 2022 at TOCE, Bangalore.

4. Dr. P. Bindhu Madhavi has participated in AICTE/ISTE APPROVED ORIENTATION PROGRAMME on "INTELLIGENT COMPUTING USING PYTHON" from 22nd to 26th December, 2021 at KSIT, Bangalore.

PAPER PUBLICATIONS

1. Kumar, Bindhu Madhavi, Janaki, "An Efficient Video Compression Framework using Deep Convolutional Neural Networks (DCNN)", Journal of Computer Science, 18(7), 589-598, 2022.

2. Shoaib Kamal, Vaishali Gajendra Shende, Korla Swaroopa, Bindhu Madhavi, Patan Saleem Akram, Kumud Pant, Shantala Devi Patil, Kibebe Sahile, "FCN Network-Based Weed and Crop Segmentation for IoT-Aided Agriculture Applications", Wireless Communications and Mobile Computing, vol. 2022, Article ID 2770706, 10 PAGES, 2022.

DEPARTMENT OF BUSINESS ADMINISTRATION

VISION

To impart value-based management education to the students, to nurture and enhance their competencies and to prepare them to face the challenges of industry, Society and country.

MISSION

To provide integrated knowledge and demonstrated ability to the students and to groom them towards building their careers well equipped professionals. To foster a passion for learning, creative thinking and leadership skills that help in developing entrepreneurial abilities among the students.

ABOUT THE DEPARTMENT

The Master of Business Administration (MBA) is the flagship program of The Oxford College of Engineering, started in the academic year 2001-2002. MBA course is a 2 year (4 semester) full time postgraduate course approved by All India Council for Technical Education (AICTE), New Delhi and affiliated to Visvesvaraya Technological University (VTU), Belagavi. MBA Course is designed to empower the students with skills and capabilities to reach responsible global positions in their career. The two-year degree of Master of Business Administration is an Outcome Based Education (OBE) and Choice Based Credit System (CBCS) scheme effective from the academic year 2018 – 19. CBCS course customized the Course work, through Core, Elective and soft skill courses, that involves a combination of lectures/field work/outreach activities/project work/vocational training/viva/seminars/internship/assignments/presentations/self-study/quiz etc., that help in the overall necessary support for the students to achieve their academic goals. The 1st year of the course comprises of 6 core papers in 1st semester and 6 core papers in the 2nd semester. In the 2nd year, along with 2 core papers, the student can opt for single or dual specialization in the following streams of Marketing, Finance & HR. Padmaja Peram has

completed her PhD from the Research centre of the Department. Presently two research scholars are pursuing their PhD under the guidance of Dr. K Tharaka Rami Reddy.

HOD'S PROFILE

Dr. K. Tharaka Rami Reddy has obtained MBA from Sri Krishnadevaraya University, Anantapur (AP) and Ph.D in Marketing from Sri Venkateswara University, Tirupati (AP)and has 28 Years of experience which contains 23 Years in Teaching and 5 Years in Industry. He has to his credit 33 papers, which have appeared in leading International & National journals.

He actively participated and presented 51 Papers in various International and National Seminars and conferences. Currently he is working as a Professor& HOD in the Department of Management Studies at The Oxford College of Engineering. He is the BOE-VTU for the Academic year 2021-22.

ACADEMIC ACHIEVEMENTS
VTU RANK HOLDER 2019-21 Batch

Steffi Thomas – 1OY19MBA36
VTU 4th RANK

STUDENT TOPPERS

Steffi Thomas
(1OY19MBA36) CGPA – 8.67

Hemalatha M
(1OX19MBA28) CGPA – 8.61

Hemalatha R Reddy
(1OX20MA019) CGPA – 8.63

Bavitha A
(1OX20BA006) CGPA – 8.42

Performance of passed out batch (2019-2021) students

Sem	Students Appeared	Overall Pass %	FCD	FC	SC
1	108	73	15	43	16
2	108	98	48	53	5
3	105	84	45	32	11
4	105	90	45	35	14
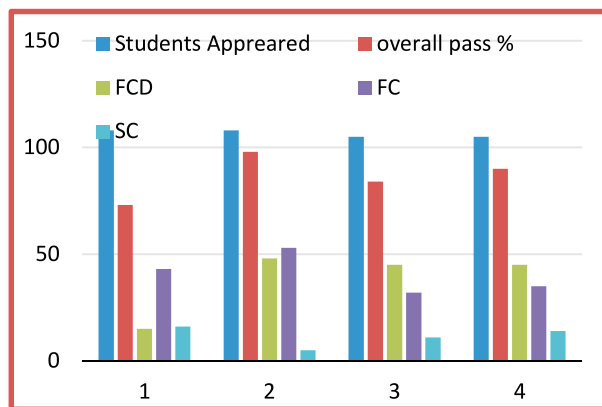
Success rate of 2019-21 batch is 86.25%

CONTENT BEYOND SYLLABUS

Industrial Visits
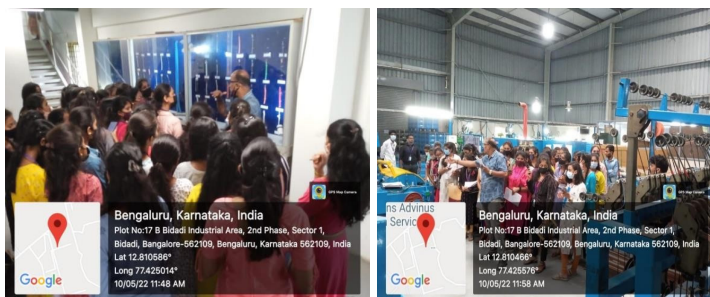
An Industrial Visit to Paras Wires Private Limited, Bidadi, Industrial Estate, Bengaluru was organized for MBA students on 10th May,2022. Paras has a great expertise in research and development of special and customized sensor cables for industrial instrumentation: load cells, pressure, displacement, vibration detectors, flow-meters, process control and analysis.

Outreach Programs

Sl. No	Date	Title of event	Place
1	13-07-2021	COVID – 19 Vaccination Awareness Campaign	Mangammanapalya
2	16-07-2021	Road Safety Awareness	Garvebhapalya
3	20-07-2021	Awareness on Impact of noise pollution	Hosa Road
4	21-07-2021	Save Water – Safe Life Campaign	Hosa Road

Entrepreneurship Mela

Entrepreneurship mela is considered as one of the tactical methods of teaching. The main reason behind this E Mela was to let students inculcate the entrepreneurship qualities. Moreover, it gives practical exposure from academic point of view. Director, Dr K S Ravi Kumar inaugurated the event and interacted with students and shared his ideas about business and marketing through personal experiences.

CSR – ACTIVITY – PROMOTING EDUCATION

The MBA department of The Oxford College of Engineering conducted an outreach program on 24th May 2022, with a visit to the Mathrubhoomi, a non-profit organization. Stationary items comprising of ruled books, lead pencils, colour pencils, blue and red pens were purchased and distributed it to 17 children of Mathrubhoomi.

Guest Lecture/Webinars Organized

Sl. No.	Date	Title of Guest Lecture	Resource Person
1	20-08-2021	Effective Interview Techniques	Prof. Nancy Johnson, Head, Dept. of Corporate Relations/Learning & Development, The Oxford Educational Institutions
2	03-08-2021	Job Hunting Skills, 2022	Mr. Mohammed Ashfak, Motivational Speaker, Author & Career Coach
3	02-08-2021	How to Make an Effective Questionnaire	Dr. Mathew Thomas Gil., Asst. Prof. Dept of Commerce, MAHE, Manipal
4	30-06-2021	Operations Research and its Applications	Prof. G. Srinivasan, DoMS, IIT Madras, Chennai
5	24-06-2021	Skill Set required to be successful in HR	Ms. Lavanya Ulaganathan, HRBP, Reckitt Benckiser

AICTE Sponsored Conference Organized

The Department organised a two-day AICTE Sponsored International Conference on Business Management in Emerging Markets (ICBMEM-2021) on 1st & 2nd November 2021.

The Inaugural address was delivered by Dr. Manpreeth Singh Manna, Former Director, AICTE, Associate Professor, SLIET Patiala, Punjab. A total of 80 papers were presented in the Two-day conference and the following expert lecture sessions were conducted. The Expert Speech on the topic "Disruptive Technologies in Marketing" was delivered by Dr. Thamaraiselvan Natarajan, Professor Management, National Institute of Technology Tiruchirappalli. Dr. Durga Prasad Somantary, Associate Professor, King Sa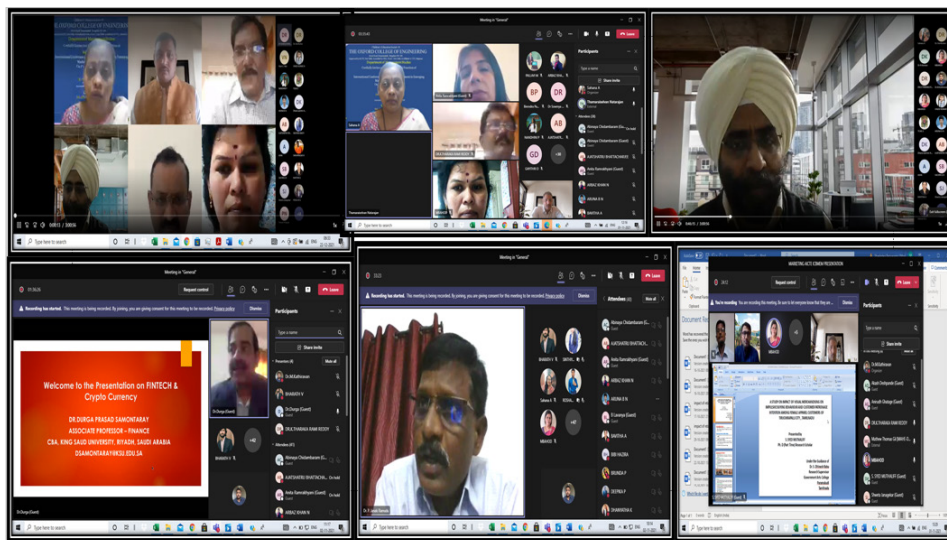ud University, Kingdom of Saudi Arabia delivered a speech on "Fintech in Emerging Markets". Dr. P. Janaki Ramudu, Professor, Dean (Academics), Institute of Management Technology, Nagpur delivered a speech on "Role of Finance in Sustainable Development".

FACULTY ACHIEVEMENTS

FDPs Attended by Faculty

1. Dr. M Kathiravan attended 5-day online FDP on "inculcating Universal Human Values in technical Education " from 14th March, 2022 to 8th March ,2022, Organized by All India Council for Technical Education New Delhi.

2. Prof. Lakshmi Suneetha Participated and successfully completed 5-day FDP on "Inculcating Universal Human Values in Technical Education" organised by All India Council for Technical Education (AICTE) from 28th March 2022 to 1st April 2022.

3. Prof. Sahana A Participated in a 5-day management development programme on "Role of Business in Sustainable Development" organised by RV Institute of Management, Bangalore from 24th to 28th January 2022.

4. Prof. Sahana A participated and completed AICTE Training & Learning (ATAL) Academy FDP on "Social Enterprise Management" from 23rd October 2021 to 27th October 2021 organised by Institute of Management Studies, Banaras Hindu University.

5. Prof. Sahana A participated and successfully completed 5-day FDP on "Inculcating Universal Human Values in Technical Education" organised by All India Council for Technical Education (AICTE) from 27th September 2021 to 1st October 2021.

6. Prof. Sahana A participated and completed AICTE Training & Learning (ATAL) Academy FDP on "Research Methodology" from 26th July 2021 to 30th July 2021 organised by Indira Gandhi Technical University for Women.

7. Dr. Tharaka Rami Reddy participated and completed AICTE Training & Learning (ATAL) Academy FDP on "Research Methodology" from 26th July 2021 to 30th July 2021 organized by Indira Gandhi Technical University for Women.

8. Prof. Sahana A participated and completed AICTE Training & Learning (ATAL) Academy FDP on "Emerging Paradigms in Organisational Behavior" from 5th July 2021 to 9th July 2021 organized by Shri Ram College of Commerce, New Delhi.

9. Dr. Tharaka Rami Reddy participated and completed AICTE Training & Learning (ATAL) Academy FDP on "Emerging Paradigms in Organisational Behavior" from 5th July 2021 to 9th July 2021 organized by Shri Ram College of Commerce, New Delhi.

10. Dr. Tharaka Rami Reddy participated and completed AICTE Training & Learning (ATAL) Academy FDP on "Sustainable Change management" from 6th September 2021 to 10th September 2021 organized by International Management Institute, Kolkata.

11. Dr. Tharaka Rami Reddy participated and completed AICTE Training & Learning (ATAL) Academy FDP on "Understanding Human Behaviors in Organizations" 17th august 2021 to 21 August 2021, organized by Prestige Institute of Management and Research.

12. Dr. M Kathiravan attended Two-week Capacity Building Programme on "Data Analysis and Research Methodology in Social Sciences" organised Department of Commerce, Alagappa University, sponsored ICSSR on 3rd September to 14th September 2021.

Publications

1. Tharaka Rami Reddy and Sahana A, Development of an Evaluation Model for Measuring the Competencies of Business School Faculty Members, Journal of Positive Psychology & Wellbeing, (Q2). 5 (3), 469 –482, 2021.

2. Tharaka Rami Reddy and Sahana A, A Study on Quality of Care and Patient Satisfaction with Reference to Eye Care Clinics in Bangalore, Journal of Education: Rabindra Bharati University (UGC CARE), XXIII, 8 (I), 51 – 56, 2021.

3. Sahana A, An empirical study on Employee Engagement in Higher Educational Institutions, Korea Review of International Studies (ABDC), 15(31), 59 – 71, 2022.

4. M Kathiravan, Artificial Intelligence in Healthcare:21 Century ages of Rifles – A Bibliometric Analysis, Asia Pacific Journal of Health Management (indexed in Scopus), 16 (4), 274-281, 2021.

Books

Sahana A, New Education Policy 2020 & Other Key Areas of Focus, (2021), ISBN: 978-93-90662-73-9, Online Gatha, Lucknow, Uttar Pradesh.

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

VISION:

Excel to meet the global needs of Computer Education, Research, Service and Human Resource with Competitive edge.

MISSION:

Learner Centered Education Industry Centered Service and Research Strong Community Relationship serve the Under Served; Meet the Regional, National and Global Educational Needs Inter Organizational Linkage Strategic Future Oriented Planning Professionalism in Computer Applications Excellence in Knowledge, Skills, Service and Attitude Open Organizational Climate.

ABOUT THE DEPARTMENT

The Department of MCA, which was started in the academic year 2001-02, has excellent infrastructure in terms of digital classrooms, a dedicated MCA library and a centrally air-conditioned and networked computer laboratory. The Master of Computer Applications (MCA) programme is a two-year programme affiliated with Visvesvaraya Technological University (VTU) in Belgaum, Karnataka, and approved by the All India Council of Technical Education (AICTE) in New Delhi, ranked as one of the top 10 colleges in terms of intellectual capital and academic excellence by Business & Management Chronicle magazine in 2022. IEEE Conferences, National & International Symposiums, Workshops, FDPs, and Inter-collegiate Technical Fest Oxytech are held for the purpose of nurturing students through extra-curricular activities. It organizes industrial—webinars, webcasts, visits, and expert lectures regularly. Teaching faculty and technical team that is highly qualified and experienced in excellent placement training, services, and recruitment.

HOD'S PROFILE

Dr. M. S. Shashidhara is a Professor and Head of the Master of Computer Applications Department at The Oxford College of Engineering in Bangalore. He has 30 years of experience in projects, teaching, and R & D. He has M.E., M.Phil, and a Ph.D. in Computer Science. Many students have completed their Ph.D under his guidance, and 5 research scholars are pursuing their Ph.D at present. He has published 3 books and several research papers in national and international journals. He is the BOS and BOE member of VTU, BOS-National College Autonomous, BOE-Mangalore University. He has more than 50 publications to his credit. Dr. M S Shashidhara received the Best Faculty Award in 2019. He is also a member of the Computer Society of India (CSI), a Life Member of the Indian Society for Technical Education (ISTE), and a Senior Member of IEEE. He has organized many national and international IEEE conferences, technical fests, workshops, FDPs, webinars, and guest lecturers for the benefits of both students and faculty. He is a recipient of the prestigious "SARVOTHAMA ACHARYA PURASKAR", a national award for impact creators in engineering education. His expertise in this domain is unmatched.

ACADEMIC ACHIEVEMENTS
Toppers List (2020-2022 Batch)

Chandrakala M
(1OX20MC016)
9.2

Eswaran M
(1OX20MC022)
9.16

Snegha C
(1OX20MC099)
8.97

Pooja Patel
(1OX20MC068)
8.91

Nisarga V
(1OX20MC063)
8.90

Performance of passed out batch (2018-2021) students
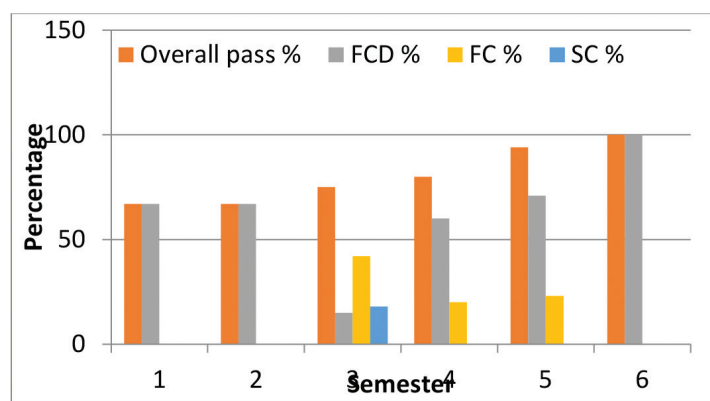
Success rate of 2018-2021 batch is 100%.

Semester wise Performance Analysis of 2018-21 Batch					
Sem	Students appeared	Overall pass %	FCD %	FC %	SC %
1	3	67	67	0	0
2	3	67	67	0	0
3	55	75	15	42	18
4	55	80	60	20	0
5	52	94	71	23	0
6	55	100	100	0	0

Guest Lecturers Organized

Sl. No.	Date	Title of the Guest Lecture	Resource Person
1	7-6-2021	Pandemic, Infodemic & Media Management	Sri Omkareswar Pandey, Founder & CEO, Golden Signatures Research
2	16-7-2021	Ethical Framework for Innovation	Dr. Sandip Kumar Roy, Executive Vice president, IDM Technologies, Dubai
3	30-8-2021 to 02-9-2021	Skill Development Program on Dart Programming & Innovative App Challenge 2021	Mr. Ankur Gupta, Founder Numerate Labs, LLP
4	11-10-2021	Diversifying Research and Publication Skills for Employment	Dr. Mohammad Kamrul Hassan, Asst Prof ISE, Kebangsaan Malaysia

Outreach programs organized

Sl. No.	Date	Activity
1	13-7-2021	Awareness Program on COVID-19 Pandemic
2	16-7-2021	Traffic Awareness campaign
3	20-7-2021	The Swachh Bharath Abhiyan Campaign
4	11-10-2021	National Education Day-2021awareness Program
5	21-2-2022	Matribhasha Diwas
6	25-4-2022	National Level Ideathon

Memorandum of Understanding

During the academic year 2021-2022, the department of MCA has signed MoU with 3 industries.

1. EBiX.BiZ, Bangalore
2. Webblitz Softwares, Bangalore
3. Kasiaex Solutions Pvt Ltd, Bangalore

STUDENT ACHIEVEMENTS

Awards of the students

1. Mahalaxmi Umesh (1OX20MC045) secured 1st position in Kannada Rajyotsava-Essay writing competition conducted on 10th October 2021 by MCA dept, TOCE.
2. Nayana R (1OX20MC060) secured 1st position in Kannada Rajyotsava-Folk Song competition conducted on 10th October 2021 by MCA dept, TOCE.
3. Naveen R (1OX20MC059) secured 1st position in Kannada Rajyotsava-Devotional Song competition conducted on 10th October 2021 by MCA dept, TOCE.
4. Rohith B (1OX21MC078) secured 1st position in Matribhasha Diwas-Quiz competition conducted on 21st February 2022 by MCA dept, TOCE.
5. Yashaswini R (1OX21MC114) secured 2nd position in Matribhasha Diwas-Essay writing (Kannada) competition conducted on 21st February 2022 by MCA dept, TOCE.
6. Sugumaran (1OX21MC114) secured 2nd position in Matribhasha Diwas-Essay writing (Tamil) competition conducted on 21st February 2022 by MCA dept, TOCE.
7. Sadhu Veer Mohan (1OX21MC081) secured 2nd position in Matribhasha Diwas-Essay writing (Telugu) competition conducted on 21st February 2022 by MCA dept, TOCE.
8. Abhilash Tripathy(1OX21MC002), Ashok Kumar(1OX21MC017), Daniya Kouser (1OX21MC030), Bundela Meet (1OX21MC025) as a team secured 1st position in Ideathon under the category engineering conducted on 25th April 2022 by MCA dept, TOCE.

Placement

Students got placed in 20 companies like TCS, Capgemini, Accenture, Cognizant, Infosys, IBM, and Happiest Minds and bagged around 65 offer letters. Keerthana C N (1OX20MC040), Nisarga V (1OX20MC063), Pooja Patel (1OX20MC068) got highest package offer letter of 5.5 Lpa from Happiest Minds.

FACULTY ACHIEVEMENTS

- Dr. M S Shashidhara appointed BOS and BOE member for National College Basavanagudi, Bangalore for academic session 2021-22.
- Prof Dharamvir appointed as BOE member for Jain University, Bangalore for academic session 2021-22.
- Dr. M. S. Shashidhara attended webinar on "Teaching Engineering courses in Kannada-Prospects & Challenges" by VCET-Puttur on 17 September 2021.
- Dr. M. S. Shashidhara attended 2-Day International Conference on ICBMEM-2021 on 1-2 November 2021.
- Dr. M. S. Shashidhara attended 5 Days STTP on "Writing & Publishing High Impact Research Publication & Scientific Documents organized by REC-Chennai "19-24 October 2020.
- Prof. Dharamvir attended and completed successfully NPTEL Online Certification with 85% in "Data Science for Engineers" during July – September 2021.
- Prof. Dharamvir attended and completed successfully Udemy Online Certification in "Machine Learning & Data Science using Python" during November 2021.

- Prof. Dharamvir attended and completed successfully Udemy Online Certification in "The Web Developer Boot camp 2021" during March 2021.
- Prof. Dharamvir attended and completed successfully Udemy Online Certification in "Guide to effective Research" during March 2021.
- Prof. Dharamvir attended and completed successfully AICTE-ATAL-FDP on "Optoelectronics: Advance Materials & Devices" during 01-05 February 2022.
- Prof. Dharamvir attended and completed successfully AICTE-ATAL-FDP on "Recent Developments in IoT" during 17-21 January 2022.
- Prof. Dharamvir attended and completed successfully AICTE-ATAL-FDP on "Game Theory & Commutation Network" during 10-14 January 2022.
- Prof. Dharamvir attended and completed successfully AICTE-ATAL-FDP on "Artificial Intelligence and Block chain Application for Food Agriculture Sector" during 24-28 January 2022.
- Prof. Dharamvir presented Research paper in ITDECC-2021, SRM University, Ramapuram Campus, and Chennai on 17-18 May 2021.
- Prof. Dharamvir presented Research paper in ICRTCIS-2021, Arya College of Engineering, and Jaipur on 22-23 October 2021.
- Prof. Dharamvir attended Awareness workshop on NIRF INDIA RANKING-2021 for Higher Education Institutions on 18-19 January 2021. From IAE, Hyderabad
- Prof. Dharamvir attended International webinar on "How to Write and publish your academic Research paper "organized by KCT, Coimbatore on 23 October 2021.
- Prof. J C Achutha attended and completed successfully 5 Day FDP on "Inculcating Universal Human Values in Technical Education" during 27th September-01 organized by AICTE-New Delhi.
- Prof. J C Achutha attended 6 Day Hands on Workshop on "Data Analytics" from 26th 31st July 2021 organized by RMKCET.
- Prof. J C Achutha attended and completed successfully AICTE-ATAL-FDP on "Artificial Intelligence and Machine Learning with Data Science" during 14-18 July 2021.
- Prof. J C Achutha attended and completed successfully AICTE-ATAL-FDP on "Artificial Intelligence and Green Power Technology" during 14-18 June 2021.
- Prof. J C Achutha attended and completed successfully AICTE-ATAL-FDP on "Recent Trends in Cyber Security" during 5-9 July 2021.
- Prof. J C Achutha attended 5 Day Workshop on "Zero Coding: Data Analytics and Machine Learning for IoT Automation" from 21st-25th June 2021 organized by VIT, Vellur
- Prof. J C Achutha attended 5 Day FDP on "Recent Trends" from 8-12 June 2021 organized by Ramaiah University.
- Prof. J C Achutha attended 6 Day STTP on "Cyber Criminology and Network Security" from 14-19 December 2020 organized by GCEM.
- Prof. J C Achutha attended and completed successfully AICTE-ATAL-FDP on "Artificial Intelligence and Machine Learning with Data Science" during 14-18 July 2021.
- Prof. Ashok B P attended and completed successfully AICTE-ATAL-FDP on "Machine learning applications for Autonomous Driving" during 24-28 January 2022
- Prof. Ashok B P attended and completed successfully AICTE-ATAL-FDP on "Industry 4.0" during 31-January-04 February 2022
- Prof Ashok B P appointed BOE member for VTU Belagavi for academic session 2021-22.

Research Publications

- M S Shashidhara, "Exploring Service Oriented Routing Protocol Network Architecture for Multicast Functionality in Internet of Things and its Applications", Design Engineering, 2021,9 ,5334-5339
- M S Shashidhara, "An Approach to Electro Photonic Image classification in Thyroid Patients using BBNN Method", Design Engineering, 2021 ,9 ,5340-5350
- M S Shashidhara, "A Framework for Improving Telecom-Services by Standardization of Virtual Network Function on Boarding", Design Engineering, 2021, 9 ,11088-11097
- Dharamvir, "Review of Dimensionality Reduction Techniques for Transformational Image Signals", Design Engineering ,2021, 8, 15007-15016
- Dharamvir, "Image Scheduling using Cloud Energy Data Computational Techniques" Published Turkish Journal of Computer and Mathematical Education –May-2021,12,4689-4694
- Dharamvir, "Exploring Service Oriented Routing Protocol Network Architecture for Multicast Functionality in Internet of Things and its Applications" in-eISSN-1757-899X, IOP Conference Series "Material Science & Engineering.

RESEARCH AND DEVELOPMENT

Patents

1. Dr. M S Shashidhara, Prof. Dharamvir published a patent entitled "a machine learning based approach analyze the characteristics of various nano materials for understanding their molecular aspects; on 13 May 2022 patent application no: 202241021302a date of filing patent: 09-04-2022 date of publication: 13-05-2022. The patent office journal no :19/2022 no-29652.

2. Dr. M S Shashidhara published a patent entitled "AI based techniques to decide and guide pilot for landing of aircrafts" on 21 January 2022 patent application no: 2022410084a date of filing patent: 10-01-2022 date of publication: 21-01-2022. The patent office journal no :03/2022 no-3144.

3. Dr. M S Shashidhara published a patent entitled "AI based predicting and optimizing traffic flow at toll plaza" on 23 July 2021 patent application no: 202141031902a date of filing patent: 15-07-2021 date of publication: 13-08-2021. The patent office journal no :33/2021 no-35776.

4. Prof. Dharamvir published a patent entitled "a machine learning based approach to analyze the network security of medical data using blockchain" on 21 January 2022 patent application no: 202241001101a date of filing patent: 08-01-2022 date of publication: 21-01-2022. The patent office journal no :03/2022 no-3137.

5. Prof. Dharamvir published a patent entitled "machine learning based approach to segment the image captured using various modelling" on 21 January 2022 patent application no: 202241001805a date of filing patent: 12-01-2022 date of publication: 21-01-2022. The patent office journal no :03/2022 no-3164.

6. Prof. Dharamvir published a patent entitled "An IOT and GPS enabled tracking of self-phased testing COVID-19 kits" on 11 February 2022 Patent Application no: 202241002955A Date of Filing Patent: 19-01-2022 Date of Publication: 11-02-2022. The Patent office Journal No :06/2022 no-7585.

7. Prof. Dharamvir published a patent entitled "A secure firewall system to monitor the routers and cloud system of a particular organization"

on 17 December 2021 Patent Application no: 202141059421A Date of Filing Patent: 20-12-2021 Date of Publication: 31-12-2021. The Patent office Journal No :53/2021 no-65011.

8. Prof. Dharamvir published a patent entitled "An IOT based industrial waste management monitoring techniques" on 31 December 2021 Patent Application no: 202141058302A Date of Filing Patent: 15-12-2021 Date of Publication: 17-12-2021. The Patent office Journal No :51/2021 no-62458.

9. Prof. Dharamvir published a patent entitled "rechargeable wireless sensor networks with multiple sinks" on 16 April-2021 Patent Application no: 202141015901A. Date of Filing Patent: 05-04-2021 Date of Publication: 16-04-2021. The Patent office Journal No :16/2021 no-19338.

10. Prof. Dharamvir published a patent entitled "accident prediction system for electric vehicle using AI" on 23 April-2021 Patent Application no: 20211110158118A. Date of Filing Patent: 03-04-2021 Date of Publication: 23-04-2021. The Patent office Journal No :17/2021 no-20359.

11. Prof. Dharamvir published a patent entitled "AI based energy sustainability in smart cities" on 06 August 2021 Patent Application no: .20214103479A. Date of Filing Patent: 02-08-2021 Date of Publication: 06-08-2021. The Patent office Journal No :32/2021 no-34664.

12. Prof. Dharamvir published a patent entitled "A machine learning based approach analyze the characteristics of various nano materials for understanding their molecular aspects; on 13 May 2022 Patent Application no: 202241021302A Date of Filing Patent: 09-04-2022 Date of Publication: 13-05-2022. The Patent office Journal No :19/2022 no-29652.

13. Prof. J C Achutha published a patent entitled "Lithium-ion battery ageing management for electric vehicle" on 20 August 2021 Patent Application no: 20211110158118A. Date of Filing Patent: 29-07-2021 Date of Publication: 20-08-2021. The Patent office Journal No :34/2021 no-30901.

14. Prof. Ashok B P published a patent entitled "machine learning based approach to analysis the heart diseases" on 04 February 2022 Patent Application no: 202231002221A. Date of Filing Patent: 14-01-2022 Date of Publication: 04-02-2022. The Patent office Journal No: 05/2022 No:6504.

15. Prof. Kalpana K published a patent entitled "A chatbot classification using machine learning approach" on 28 January 2022 Patent Application no: 202241002510A. Date of Filing Patent: 17-01-2022 Date of Publication: 28-01-2022. The Patent office Journal No: 04/2022 No:4598.

16. Prof. Mridula Shukla published a patent entitled "machine learning analytics for specialised stock trading" on 28 January 2022 Patent Application no: 202211002430A. Date of Filing Patent: 15-01-2022 Date of Publication: 28-01-2022. The Patent office Journal No: 04/2022 No:4341.

17. Prof. Divyashree Nayak published a patent entitled "A firewall system in the architecture of iot to avoid cyber-attack" on 28 January 2022 Patent Application no: 202211002430A. Date of Filing Patent: 17-01-2022 Date of Publication: 28-01-2022. The Patent office Journal No: 04/2022 No:4599.

Funded Projects

DEPARTMENT OF MATHEMATICS

VISION

We envision that our department will continue to grow as an intellectually stimulating environment that attracts engineers who have a knack for interdisciplinary research. We hope that the department will play a central role in bridging fundamental sciences and engineering.

MISSION

Our mission is to educate our students to excel in their work as well as mentor the next generation of engineers. We provide Engineering Mathematics with theoretical and application-oriented techniques and make them succeed personally and professionally.

ABOUT THE DEPARTMENT

The Department of Engineering Mathematics is one of the pioneer departments of the institution. The department serves the institution and the community by providing mathematics education to Engineering Mathematics, as well as MCA & M.Tech. courses. The department strives to provide quality education to a diverse student community, with a total of over 3000 students. Engineering courses focus on the principles, methods and applications, and provide the mathematical foundations for all branches of engineering. The department includes 12 faculties and three Ph.D. holders who are having outstanding knowledge in many fields of mathematics in addition to their commitment to excellence in teaching.

In addition to teaching, mathematics faculties are actively engaged in research in the domains of Graph Theory, Fourier Series and Wavelet Transforms, Finite Element Methods, Topology, Numerical Analysis and Operations Research. Faculty members have participated regularly in many refresher courses, international and national conferences, seminars, workshops and symposia conducted by various universities and research institutions. The department has put forward certain objectives with a mission and vision for the future, where students can grow exponentially responsive to society as a whole. Thus, today's engineering students need to be rooted primarily in principles, not techniques.

HOD'S PROFILE

Since 2007, he is working as a Professor and Head of the Department of Engineering Mathematics, as well as Dean Examination, B.E. First Year Chief coordinator in TOCE. He is having 32 years of teaching experience and worked as a Professor and Head in the Department of Mathematics, Eritrea Institute of Technology, Asmara, N.E. AFRICA. He is having excellent teaching skills and taught many subjects of Mathematics in B.Sc. Computer Science, BCA, PGDCA, MBA, MCA and Engineering. He worked as a Chief Superintendent and DCS of VTU examinations in TOCE, to conduct

VTU (UG & PG) theory and practical examinations for about 5000 students, also he worked as BOE and BOS chairman and member in VTU and GUG. His research specialization is Applied Graph Theory. One research scholar was awarded the degree of Ph.D. (VTU) in the year 2020, and presently five research scholars are working under his guidance. He published 28 research papers in reputed National and International Journals. His contributions to the field of Graph theory are Anti-domination Number of a Graph, The Edge Degree of a Graph and Isotopic and Genetic Graphs.

ACADEMIC ACHIEVEMENTS

The list of students who have secured 100 out of 100 in VTU exams from June 2021 to July 2022, with the corresponding faculty name:

Sl.No.	Name of the Student	USN	Subject Name	Subject Code	Name of the Faculty
1	Rakshitha N	1OX21EC070	Calculus and Differential Equations	21MAT11	Mrs. Selastina Mary A.
2	Nathuram	1OX21BT024	Calculus and Differential Equations	21MAT11	Mrs. Moumita Chatterjee
3	Vishal Shah	1OX21IS123	Calculus and Differential Equations	21MAT11	Mr. Naveen Kumar K. S.
4	D. Swarup	1OX20EC019	Transform Calculus and Numerical Techniques	18MAT31	Mr. Naveen Kumar K. S.
5	Inchara	1OX19BT013	Biostatistics	18BT31	Mrs. Lavanya B. S.

Rakshitha N.
(1OX21EC070)

Nathuram
(1OX21BT024)

Vishal Shah
(1OX21IS123)

D. Swarup
(1OX20EC019)

Inchara
(1OX19BT013)

FACULTY ACHIEVEMENTS

Mrs. Nagashree Narayan Bhat was awarded the degree of Ph.D. on the thesis entitled "Recent Trends in General and Soft Topology" in the domain of Topology under the guidance of Dr. P. G. Patil, Professor, Department of Mathematics, Karnataka University Dharwad on 7th June 2022.

EVENTS ORGANIZED

Sl.No.	Event	Date
1	Mathematics Quiz	30th November 2021
2	National Mathematics Day	23rd December 2021
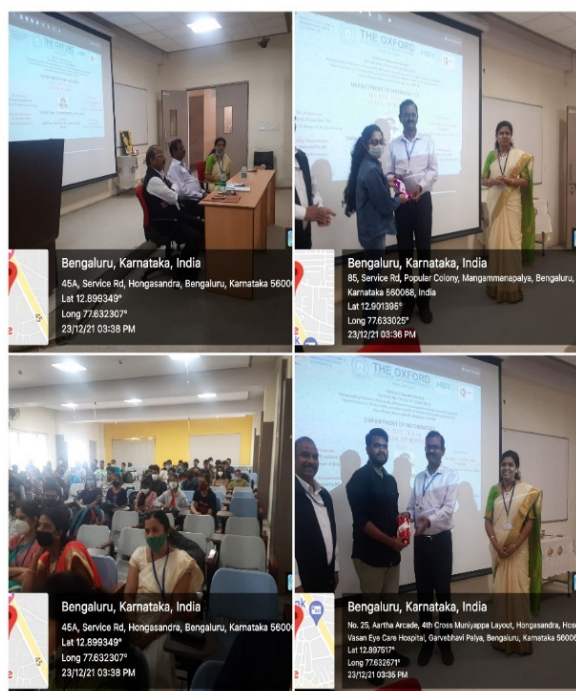
Glimpse of Mathematics Quiz

Celebration of National Mathematics Day

DEPARTMENT OF CHEMISTRY

VISION:

Our vision is to give our students an in-depth exposure to the latest developments in Chemistry made by reputed scientists and experts in this field. To equip individuals capable of earning in the new millennium.

MISSION:

Our mission is to provide a contemporary foundation for addressing problems in Chemistry. Also, to develop competent engineers with good values and to equip them to face the challenges of the continuously changing world.

ABOUT THE DEPARTMENT

The department of Chemistry was established in the year 2000. The motto of the department is to provide quality education. The subject chemistry is the basic knowledge upon which all other natural sciences and engineering are built up. The department is eternally engaged in the academic enrichment of students as well as their overall progress by exposing them to the real challenges in the world through participation in various competitions. The department is engaged in various research activities for PhD program affiliated to VTU, Belagavi.

HOD'S PROFILE

She is working in the Department of Chemistry as Prof. & HOD, since 2007 and has 23 years of teaching experience. Her research domain is Kinetics & Mechanisms of redox reactions, Nanotechnology, Conducting Polymers and Green Chemistry. Under her guidance five research scholars have registered for the PhD program affiliated to VTU, Belagavi. Three research scholars were awarded PhD Degree and two research scholars are pursing the PhD Degree. She had published more than 35 research papers in national and international journals and also presented more than 20 papers in the national & international conferences. Fund received from KSCST for guiding the BE-Automobile Final Year students. She is a member of doctoral committee of various colleges, affiliated to VTU, Belagavi and Presidency University, Bengaluru. She is also a member of Electrochemical Society of India, under IISc, Bengaluru.

ACADEMIC ACHIEVEMENTS

Result Analysis, I Semester, 2021-22

- Engineering Chemistry-89%
- Engineering Chemistry Lab-100%

Toppers Details (Chemistry Cycle, I Semester)

Topper	Name	USN	Percentage
I	Sabah Tabasum	1OX21CS121	90.2
II	Nathuram J	1OX21BT024	88.6
III	Chandana L	1OX21CS035	88.4

Outreach Activities

Sl.No.	Date	Activity
1.	31st July, 2021	Save Tree Awareness Programme
2.	11 Nov., 2021	National Education Day
3.	22nd April, 2022	World Earth Day

FACULTY ACHIEVEMENTS

FDP/Webinar attended

1. Dr. Surekha M attended a national webinar on "Bio-based sustainable Polymers Blends for Medical Applications", 23rd March, 2022, Sarada Vilas College, Mysuru.

2. Dr. Surekha M attended an international webinar on "The need to move towards inter and Trans-Disciplinarily Research for Impactful Innovations", 24th September, 2021, JSS Academy of Technical Education, Bengaluru.

3. Dr. Surekha M, Dr. H N Gayathri and Dr. Shipra Bhati attended FDP on "Recent Trends in Sustainable Energy Management & Green Chemistry", 6th-10th Dec., 2021, Global Academy of Technology (GAT), Bengaluru.

4. Dr. H. N. Gayathri attended AICTE–ATAL-FDP on "Implementation of emerging waste to energy technologies-an opportunity and the challenges on energy recovery system", 15th-19th Nov. 2021, New Horizon College of Engineering, Bengaluru.

5. Dr. Shipra Bhati attended AICTE–ATAL-FDP on "Advanced polymers for energy conversion", 25th-29th Oct., 2021, Cambridge Institute of Technology, Bengaluru.

Publications

1. Surekha M, A Novel Approach to the study of Oxidation of Cyclohexanol to Cyclohexanone using modified Montmorillonite Nanoclays, Chemistry Africa, Springer, 5, 607–615, 2022.

2. H. N. Gayathri, High-performance 2D photonics MOEMS pressure sensors, International Journal of Information Technology (IJIT), Springer, 14. 10.1007/s41870-022-00986, 2022.

3. H. N. Gayathri, Theoretical investigation of Bragg Reflector optical sensor for the measurement of cryogenic temperature, Material Today Proceedings, Elsevier, 58 (1), 451-455, 2022.

4. H. N. Gayathri, Performance analysis of photonic crystal-based biosensor for the detection of bio-molecules in urine and blood, Material Today Proceedings, Elsevier, 2021. https://doi.org/10.1016/j.matpr.2021.06.192.

5. Shipra Bhati, Rational design of flavonoid based potential inhibitors targeting SARS-CoV 3CL protease for the treatment of COVID-19, Journal of Molecular Structure, Elsevier, Volume 1237, 2021, 130380.

6. Shipra Bhati, Microplastic: A Persistent Contaminant in the Environment, Science of Environment, Volume-1, 36-43, 2022. ISBN: 978-81-955557-9-6.

RESEARCH & DEVELOPMENT

The department has a research centre approved by the VTU. The centre is equipped with a laboratory having facilities to grow and analyze catalysts and kinetics studies. Research scholars are publishing their work in the reputed journals.

Thrust Areas: Kinetic and Mechanisms of few Redox Reactions, Conducting Polymers, Nano Technology, Organic Synthesis, Electroplating, and Material Science.

Patent

Dr. H. N. Gayathri was granted a patent entitled "A System for Developing an Activated Carbon for Biosorption of Cadmium Ions from Aqueous Solution" on 12th Jan 2022. Patent Application no: 202021106578 Date of Filing Patent: 2nd Dec. 2021, IP registration: CO1B32/312, Germany.

DEPARTMENT OF PHYSICS

VISION

To inculcate interest in Physics and promote the understanding of it and also to develop observational and computational skills, which will take the development in technology to new heights.

MISSION

The department has been working towards fulfilling its vision through a synergic combination of teaching and research. The department also strives to promote excellence in technical education and scientific research, through the effective use of Physics in real-time engineering problems.

ABOUT THE DEPARTMENT

The Department of Physics is one of the most important departments of the institution. The motto of the department is to provide quality education. The department has two well-equipped laboratories for undergraduate Engineering courses. Physics is the foundation of science upon which all other natural sciences and engineering are built.

HOD'S PROFILE

Prof. Abdul Kadar C.H. has been working in the Department of Physics as an Assistant Professor since 2011, has 13 years of teaching experience, and has been HOD in charge since 2018. His research domain is nanotechnology and conducting polymer nanocomposites. He registered for a Ph.D. at the PES Institute of Technology,

South Campus, Bangalore, affiliated with VTU Belagavi. He did his M.Sc. and M. Phil. at Madras Christian College, Madras University, Tambaram, Chennai. He published two research papers in international journals and presented seven papers at national and international conferences.

ACADEMIC ACHIEVEMENTS
Result analysis, I SEM:

The pass percentage in VTU Exams 2022 for Engineering Physics is 84% and the pass percentage for Engineering Physics Lab is 97%.

Toppers Details in VTU Exams
(Engineering Physics, I SEM)

Sl.No.	Name	USN	Percentage
1	Sneha R	1OX21EC092	93%
2	Akash Kashyab	1OX21IS012	92%
3	Pranav Bhat	1OX21IS077	92%
4	Namratha Prabhu	1OX21CV012	92%
5	Vinila M	1OX21EC106	92%

Outreach programs organized

| Sl.No.	Date	Activity
1.	26-07-2021	Awareness on Global Warming at Virath Nagar, Bengaluru
2.	26-07-2021	Plastic Free Awareness Camp at Thilak Nagar, Bengaluru
3.	26-07-2021	Awareness on Radiation Hazards at Thilak Nagar, Bengaluru
4.	26-07-2021	Covid-19 Awareness Camp at BTM 2nd stage, Bengaluru

STUDENT ACHIEVEMENTS

Smart India Hackathon 2022

The first-year participants in the Smart India Hackathon (Internal) 2022 on March 23rd, 2022, TOCE under the theme of "Water Sanitation and Automated Technology," Mr. Ummed Ram. D, Mr. Deepak Reddy, and Abhishek Das from ECE, as well as Nagaraj. C, Kiran Kumar. K from ME, Raja Kumar Singh, Nikil. T.P, Chethana P.B, from EEE, and Namratha C Prabhu from CV under the theme of "remote controlled automatic drip folding machine".
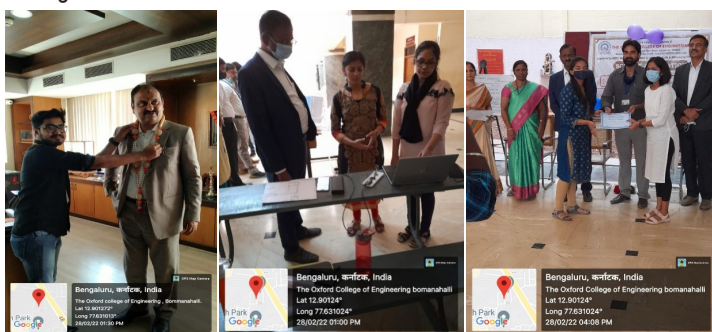
Science exhibition

The Science Exhibition was conducted on February 28th, 2022. It was a great event where many participants came up with many new ideas. This year's theme was "Integrated Science and Technology Approach for a Sustainable Future." There were around 25 groups that participated, where first-year students also actively participated.

Winners List

Sl. No.	Name	Department	Topic Name	Position
1	Nathuram J Haripriya K	BT, MT	Transparent solar panel	First
2	Ummed Ram D Abhishek Das	ECE	Ideal City	Second
3	Sumha Kulsum Suvecha Mandal	BT	Wi-Fi oximeter	Third

FACULTY ACHIEVEMENTS

- P. Soundhirarajan presented a paper on "Effect of Mn concentration on Structural, thermal, and optical properties in BaSO4 Nanoparticles" which was awarded the best paper among Basic Sciences in NCSEM-2K22 on July 1st, 2022, at the Oxford College of Engineering, Bangalore.

- Abdul Kadar C.H. presented a paper on "Synthesis and Enhancing of a New Type of Anti-Corrosive Polypyrrole/Zinc Tungstate Composites" on July 1st, 2022, at the Oxford College of Engineering, Bangalore.

- Abdul Kadar C.H presented a paper on "Comparative Study of Polyaniline/ZnWO4 and polypyrrole/ZnWO4 composites as anticorrosive applications" on June 1st, 2022, at Jain Deemed to be University, Bangalore.

- Shanthala V.S gave a talk on "Recent Trends in Nanotechnology" at Government First Grade College, HSR Layout, Bangalore on February 28, 2022.

- Shanthala V.S. chaired a session for oral presentation in the students' symposium held at the Indian Academy of Degree College, Bangalore on November 14th, 2021.

- Shanthala V.S. presented a paper on "Impact of nanotechnology on Material Science" at the IAPT National Convention held at Shri Vaishnav Vidyalaya Vishwa Vidyalaya, Indore, Madhya Pradesh, from October 28th to October 30th, 2021.

Paper Presentation

Publications

1. Mr. Abdul Kadar, C.H., corrosion-resistant polyaniline coated zinc tungstate nanocomposites with enhanced electric properties for electromagnetic shielding applications. Springer Journal of Macromolecular Research, April 19th, 2022.

2. Mr. Abdul Kadar, C.H., Enhancing electromagnetic interference shielding effectiveness of anticorrosive Polypyrrole/Zinc tungstate composites: A multifunctional approach, Springer, April 27th, 2022, Journal of Material Science: Materials in Electronics.

DEPARTMENT OF PHYSICAL EDUCATION & SPORTS

VISION

Physical Education and Sports Department will broaden, enhance and develop its teaching, education, enhancing health and well-being, fostering self-esteem and empowerment, facilitating social inclusion and integration.

MISSION

Department of Physical Education aims at total education through the physical, intellectual, emotional, and in order to bring up healthier, happier and experiences that lead to the achievement of total wellness and result in a longer and healthier life.

ABOUT THE DEPARTMENT

Our college is encouraging the students in sports as well as academics. Every year we select the students from different branches to train them to compete in various sports meet. Some of the students have been selected to participate in VTU sports also. Intra-faculty and inter-faculty games, and sports competitions are organized by the department regularly every year for faculties and students. Students are specially trained for participation in Zonal and Inter-Zonal National competitions organized by various colleges and universities. TOCE has excelled in these events by winning prizes and awards in individual and group events.

HOD's PROFILE

Mr. Mahesh G, M. Ped, Director of Physical Education, has 10 years of teaching, experience in the field of physical education, he participated in 30th junior National Kabaddi Championship 2003, Senior National Kabaddi Championship in Hyderabad, 2005, Represented Bangalore university in south zone held at Karnataka University, Dharwad in (2006-07) and secured 4th place, Represented Bangalore university in All India university competition held at Kalyani University, Kolkata in (2006-07) Secured 3rd place, Represented Bangalore university in south zone held at Periyar University, Salem in (2007-08), Represented Bangalore university in south zone held at Acharyanagarjuna University, Guntur in (2008-09)and 26th Kabaddi Federation Championship held at Bangalore. He was a Coach and manager for VTU Table Tennis, Kabaddi, athletic, netball Team-South Zone Inter University Competition at All India Inter University Competitions. He is a Qualified Referee for Karnataka State Amateur Kabaddi Federation Official 2012.

Students Participated in Inter-University Level Tournaments

Sl.No.	Name	Dept.	Event	Place & Date	Prize
1	Dhanya Ganapathi	ISE	Hockey	Mangalore University, Mangalore on 27th to 31st December 2021	Participating
2	Pragnya Rao	ME	Hockey	Mangalore University, Mangalore on 27th to 31st December 2021	Participating
3	Sowjanya	ISE	kabaddi	Alagappa University, Karaikudi (TN) on 22nd to 26th February 2022.	Participating
4	Meghana J	ISE	Net Ball	Central University of Himachal Pradesh on 20th to 24th March 2022.	Participating
5	Bharath G	ISE	Net Ball	Bharathidasan University, Tiruchirappali (TN) on 20th to 23rd March 2022.	Participating
6	Prajwal	ME	Shooting	Swami Vivekananda Subharti University (UP) on 12th to 15th April 2022.	Participating
7	Rajesh R Reddy	ISE	Carom	held at T John Institute of Technology on 24th and 25th June 2022.	2nd place

Dhanya Ganapathi

Pragnya Rao

Sowjanya

Meghana J

Prajwal

Bharath G

Rajesh R Reddy

Mohammad Faiz Pathan (ISE Department) participated in Bangalore district level intercollegiate powerlifting championship and was secured 1st place, held at Global Academy of Technology on 23rd and 24th June 2022. And also, participated in sub-juniors', juniors' and seniors' championship intercollegiate powerlifting championship tournaments. Secured 1st place, in RK FITNESS Banashankari Bangalore on 2nd July 2022.

Rakshitha (EEE Department) represented VTU Single-Zone Athletic competition (women) 20 km walk race, held at SJCIT Chikkabalapura during 27th to 30th June 2022 and secured 3rd place.

College team Achievements

Hockey (women) team secured Bangalore Zone 2nd Runner up at Sri Sairam College of Engineering, Bangalore on 17th and 18th December 2021.

Kabaddi (men) team secured 2nd place in State Level Tournament at HSR Stadium Bangalore on 28th February to 1st March 2022.

Throwball (women) team participated in VTU Bangalore Centre and secured 1st place at TOCE Bangalore on 6th on 7th June 2022.

Ball Badminton (men) team represented VTU Bangalore Zone Competition at DBIT Bangalore on 2nd and 3rd July 2022.

Kho-kho (women) team participated in Inter Collegiate Sports Fest Tournament and secured 3rd place at BMSCW Bangalore on 5th July 2022.

EVENTS ORGANIZED

● Throwball (women)

The Inter Collegiate Bangalore Central Zone Throwball Tournament was held on 6th and 7th June 2022 at our college campus. The tournament was inaugurated by Dr. Kiran Kumar H K Regional Director Bangalore Central Zone & PED MSRIT, Dr. K. M. Ravi Kumar, Director, TOCE and Dr. N. Kannan, Principal, TOCE and the event was conducted successfully. TOCE won the 1st prize and BNMIT College won the 2nd prize.

Winners' and Coordinators' teams

- VTU Chess Tournament

A Chess Tournament was organized by the department on 22nd and 23rd June 2022. The tournament was inaugurated by Dr. Shivaram Reddy, PED BMS College of Engineering, Dr. K. M. Ravi Kumar, Director, TOCE, Dr. N. Kannan, Principal, TOCE and Mr. Mahesh G, Head of Sports Department, TOCE. The tournament was conducted for both male and female categories. Total of 145 and 85 players participated in men and women categories respectively.

LIBRARY & INFORMATION CENTRE

VISION

To build the library as a centre for excellence in accessing the right information at a right time to the right user.

MISSION

To embrace the principle of excellence in advancing the teaching, learning, research, and service mission of the Institute through the acquisition, organization and management of collections for access and use, through the provision of reference and instructional services, and through a variety of collaborative and reciprocal.

ABOUT THE DEPARTMENT

The Oxford College of Engineering library was established in the year 2000. The Central Library is housed in a main building and seating capacity is 300. It is a main resource of knowledge, which is an integral and important part of our institute of higher learning. The library aims to stock all the books and periodicals that the students and faculties are Science, Management, Science & Technology and Humanities. Addition to this, MBA, MCA library and eleven more Departmental libraries are also functioning under this Library & Information Centre. The library remains open from 9.00am to 8.00pm.

TOCE Central library catalogue database has more than 56356 Books, 3085 CD's, 1350 Bound Volumes and 18 News Papers. Using LIBSOFT Library Software Administrator Can Search the Dept. Library Catalogue by Author, Title, Subject, and Keywords. Also, the administrator can know the latest additions of books issue, return, renewal and OPAC search and other library activities are computerized by using LIBSOFT Library

Software. Students and faculties can utilize the library regularly in an effective manner.

Suprabha. S, Chief Librarian, is expertised in managing and maintaining library resources and providing best services and good library facilities for students and staff.

LIBRARY SOURCES

1. 56356 volumes of text books and reference books withdifferent titles
2. Bound Volumes of Printed Journals 1350.
3. Books oriented CD's 3085
4. VTU Consortium E – Resources & E-Journals.
5. IP based VTU Consortium Online Databases Access
6. Book Bank Facility for SC/ST Students
7. Earlier Exam question papers collection
8. Newspapers & General Magazines
9. Internet access facility
10. Reprography/Document Scanning

JOURNALS

The Oxford College of Engineering library has 21 print journals and TOCE has become the member to VTU E – resources Consortium, Belagavi, Karnataka. Through the Consortium college library can access more than 6593 e-journals & 3469 e-books through URL link and MAPMyAccess from different publishers such as IEEE, Elsevier, Taylor & Francis, Springer Nature, Emerald, Proquest, MintBooks (Remote Access + Discovery), Net Analytics/Sententia and Turnitin (Virtual Library).

LIBRARY SERVICES

1. Open Access System
2. Circulation Facility
3. Book Bank Facility: Books will be issued to SC/ST Students for 30 days.
4. Reference Services
5. OPAC Search Services
6. Internet Browsing Services
7. Display New Arrivals
8. Departmental Libraries for Faculty
9. News Paper Clipping Services
10. Selective Dissemination of Information Service
11. Current Awareness Service (CAS)
12. Inter Library Access Service
13. E-Journals & E – Resources Access
14. Reprography services
15. Question Bank Services

LIBRARY USAGE

Adopted Open access system & users can select the required book very easily by themselves. OPAC Search: by this user can search the book details like author, title publisher and availability of books in the library by themselves. Every year TOCE Library is giving best user award to students to encourage for their academic studies.

E-Resources

- e-Journals-IEEE(POP): Covers IEEE e-Journals, Conference Proceedings and Standards, (530,000 Papers –from 100core IEEE Conference titles in POP), http://ieeexplore.ieee.org/
- Springerlink: Covers 690e-Journals, http://www.springerlink.com
- Taylor and Francis: Covers 585 e-Journals, http://www.tandfonline.com
- Proquest Database: Covers 4900 e-Journals, Conference Proceedings and 7800 Abstracts. Proquest VTU Technology Collection: https://www.proquest.com/165290
- Elsevier: Covers 298, www.sciencedirect.com
- Emerald Management First Database: 120 e-journals, case studies, interviews, mgt interview, conscience article https://www.emeraldinsight.com/
- e-Books*: Mint Books, Covers e-Books 10,000+e-Journals 5700+https://mintbook.in
- Turntin*: https://www.turnitin.com/Plagiarism Originality Online Check*
- NetAnalytiks: https://sententia.online/LANQUILL (Writing Grammar Tool)
- Open Access – E-Resources
- Free Engineering NPTEL Videos
- DOAJ – Directory of Open Access Journals
- OAJSE – Open Access Journals Search Engine
- DOAB – Directory of Open Access Books
- Bookboon's free online textbooks

FROM IEEE BRANCH COUNSELLOR DESK

Dr. Preeta Sharan, Professor, Electronics & Communication Engineering

IEEE Student branch started in 2011 in TOCE. Under TOCE IEEE student branch, various activities have been done for the benefits of the student community which will be helpful in their growth and shape their career. Dr.

Preeta Sharan is the IEEE Student Branch Counsellor. We are associated with IEEE Photonic Society Bangalore section and offering the internship to student members in the last 5 years.

WEBINARS ORGANISED

Webinar was held on JUNE 8th 2022 at 12:00 P. M. The resource person was Dr Vaishali Dhare who is working as assistant professor in Electronics and Communication Engineering. The program was held virtually and it was seen huge participation from academic institutions.

Strategic Consultation with Oxford Group of Educational Institutions in Bengaluru for Global Outreach Mr. Onkareshwar Pandey, Founder of Commonwealth Thought Leaders Forum and Chairman, Observer Global Media Group met with Sri SNVL Narasimha Raju, Chairman of The Oxford Educational Institutions in Bengaluru for Strategic discussions. On 13th April 2022 at 9.0 am.

A paper presentation competition was organized under the banner of IIC, Dept of ECE on 9th May 22 at 10.30 am.
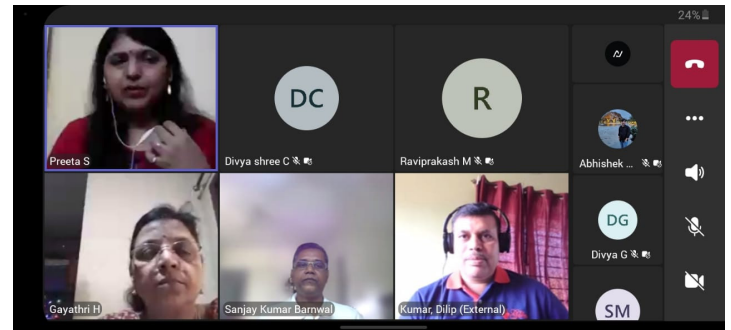
The Oxford College of Engineering, Bengaluru-IEEE SB TOCE in association with IIC, ITE and IETE organized a Webinar on "Familiarization of sap for entrepreneurship as a career opportunity" by Mr. Sanjay Barnwal IT-Manager-APAC & MEA, on 5th Feb 2022.
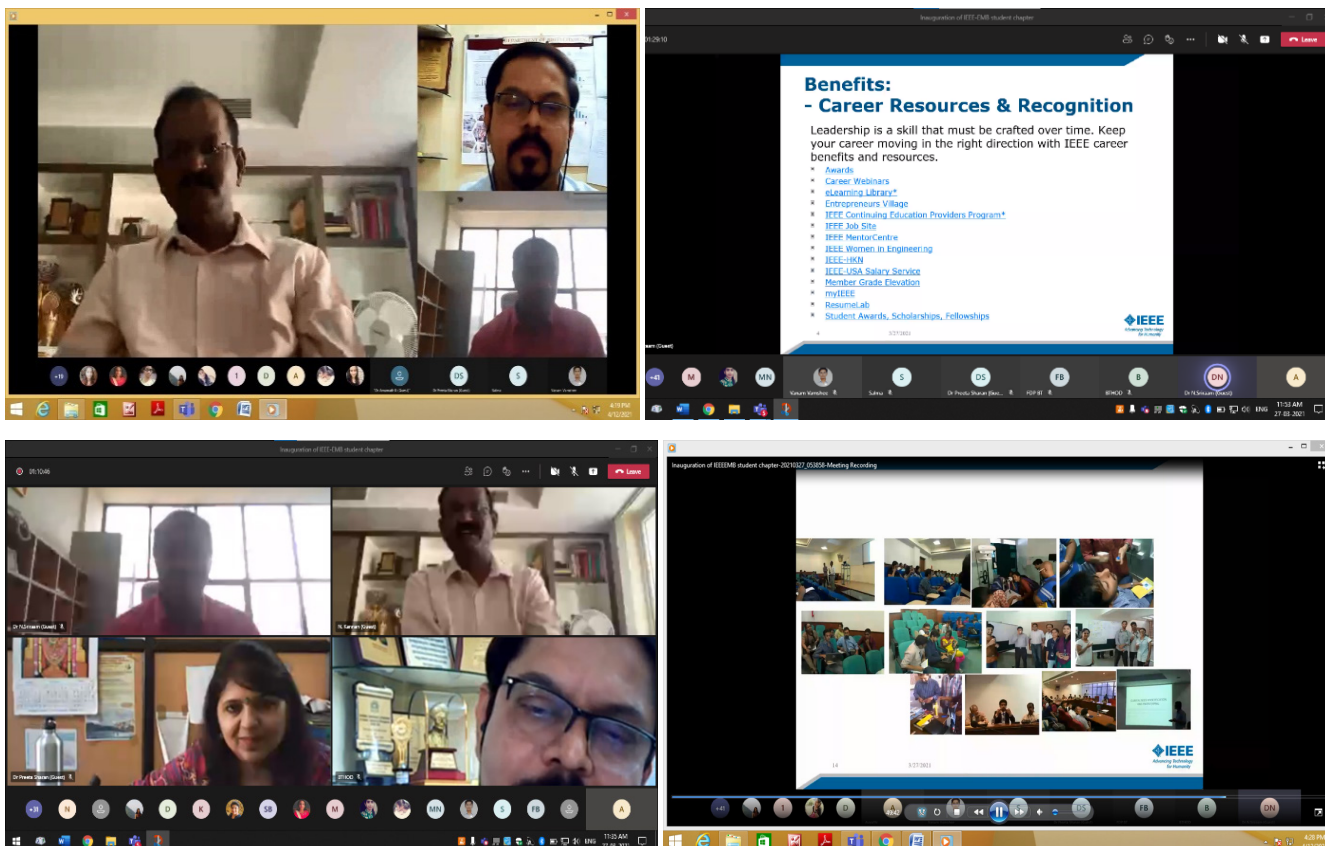
IEEE-EMB SOCIETY STUDENT CHAPTER
Dr. B.K. Manjunatha, Professor & Head, Biotechnology

IEEE-EMB society student chapter inauguration organized by the Department of Biotechnology, The Oxford College of Engineering, Bangalore was held on the 27th of March, 2021 at 11 AM. The inaugural ceremony was presided by Dr. Sriram, Professor and Head of R&D, Ramaiah Institute of Technology, Bangalore. Under the guidance of Dr. Preeta Sharan IEEE branch counselor, Bangalore section, and with the able leadership of Dr. B.K. Manjunath, Professor & Head of the Department of Biotechnology and IEEE-EMB society Advisor.
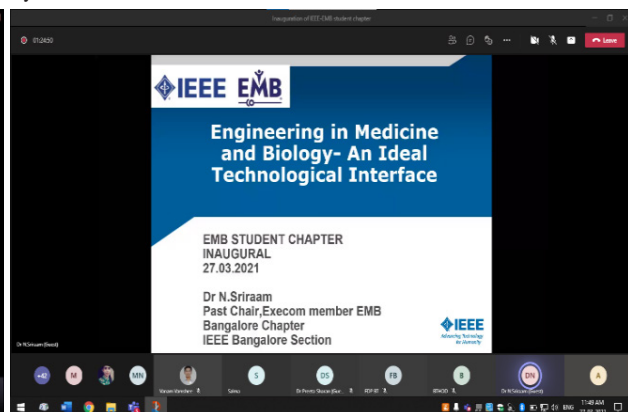
Dr. Sriram, EMB SOCIETY Chairman, IEEE Bengaluru Section delivering inaugural address during inauguration of IEEE-EMB Society student branch at TOCE. Dr. Amarnath K, Director, TOCE, Dr. N. Kannan, Principal, TOCE, Dr. Preetha Sharan, IEEE Student Branch Counselor, TOCE.

COMPUTER SOCIETY OF INDIA STUDENTS CHAPTER
Dr. Vanajaroselin E. Chirchi, Professor, Information Science & Engineering

The Oxford College of Engineering inaugurated CSI Student Chapter on 29th November 2021. CSI Student chapter gives opportunities for students to interact with industry professionals and get technology updates through conferences, seminars, tutorials, events and workshops. The CSI Students Chapter inaugurated by the honourable chief guest Dr. Sundaresh Rao B.S., a member of managing committee CSI Bangalore Chapter and the president of the function, Dr. N. Kannan, Principal of The Oxford College of Engineering.

The Poster Presentation was organized on 29th Nov and the topic was "Usage of AI in different engineering branches".
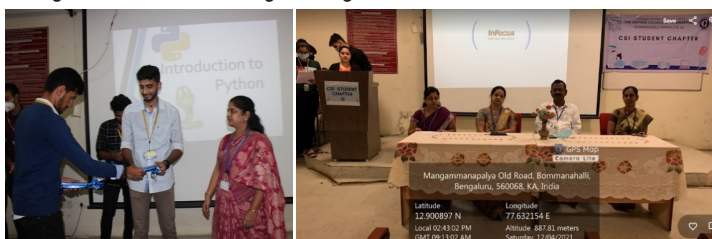
On 30th November a coding competition was organized with 30 participants using codechef and slidedo application software, it helped the students to analyzed themselves and enhance their technical abilities.

On 3rd Day, 1st December 2021 a workshop on Python was organized by the Final year students of ISE and CSE department. It was a very informative and interactive with hands-on session.

On 2nd December 2021 using Photoshop editor software. It was an event to enrich the creative thinking of the participants and to support the artist within the students.

PATENT CELL
Dr. B.K. Manjunatha, Professor & Head, Biotechnology

The Oxford College of Engineering, in association with Visvesvaraya Trade Promotion Centre (VTPC), Department of Industries and Commerce, Government of Karnataka and Karnataka State Council for Science and Technology (KSCST), has organized the inaugural ceremony of "THE OXFORD-KSCST-VTPC CENTRE FOR PATENT AND TECHNOLOGY TRANSFER' on 18.01.2021 at the Oxford Group of Institutions. Various guest lectures were organized related to IPR. "Know Your Intellectual Property Rights" and "Career Prospectus in the context of Covid-19 outbreak" are the two important events conducted in 2021-2022. During the tenure 19 patents were filed and 6 products were developed.
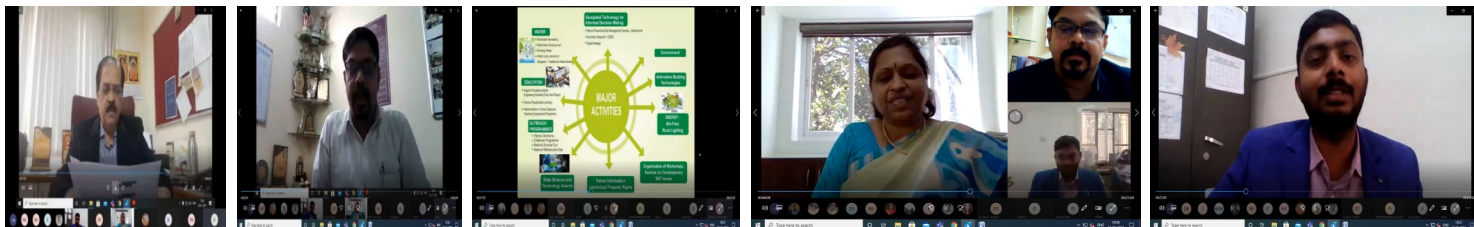
The Oxford-KSCST-VTPC Centre for Patent and Technology Transfer

INSTITUTION'S INNOVATION COUNCIL
Dr. Bindhu Madhavi, Prof & Head, Artificial Intelligence & Machine Learning

The Oxford College of Engineering, Bengaluru established Institution's Innovation Council in the Month of October 2021. Ministry of Human Resource Development (MHRD), Govt. of India has established 'MHRD's Innovation Cell (MIC)' to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs).

IIC is mainly Established:

1. To create a vibrant local innovation ecosystem.
2. Start-up supporting Mechanism in HEIs.
3. Prepare institute for Atal Ranking of Institutions on Innovation Achievements Framework.
4. Establish Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas.
5. Develop better Cognitive Ability amongst Technology Students.

IIC in collaboration with the departments conducted 90 Events including IIC calendar, MIC activities, celebration activities and self-driven activities under the themes of Innovation, Start-up, R & D, IPR awareness, leadership talk, field visits, design thinking for the benefits of students and faculty. This legacy will be continued further to promote innovation culture in the campus.

Also, we have registered for mentor mentee scheme, ATAL school linkage, impact lecture series and nominated student teams for idea submission under IIC Portal. 9 staff members received innovation ambassador training certificates. Institutions Innovation Council received 2 Star Rating for the Quarters 1 & 2 of 2020-21.

15 student teams were nominated under different themes for Smart India Hackathon to exhibit innovative ideas converting them to useful prototypes for the social needs. Two student teams were selected for further rounds.

1. Team Name-Healers-Naveen Jaishwal Team-MECH
2. Team Name-Wings-Rakshitha K V Team-ECE

FROM THE DESK OF DEAN RESEARCH AND DEVELOPMENT
Dr. B.K. Manjunatha, Professor & Head, Biotechnology

The Research Committee's primary objective is to establish platform for the faculties to work with researchers, research clusters and developing external relationships with funding agencies, Nationally and Internationally and with other Universities and Research Institutions. The role of the College Research Committee is to provide a platform for the faculty and students about the present trends in research and development in their concerned subjects and interdisciplinary.

The research-based learning is destined to learn more and better than regular academics and encourages faculty and students for active research. Faculty contribute significantly to the scientific community by publishing their research in journal of high repute, during this period 96

journal articles were published. The Innovative concepts and products were encouraged to file patent, around 19 patents have been filed during the tenure of this newsletter. Faculty of the Institute gets financial assistance from major organizations viz NRB, DRDO, BIRAC, BRNS, AICTE, VTU, KSCST, VGST, NIF, etc.

The Institute also aims at nurturing sustainable technology development for societal benefit, we are proud to state that, the department of Biotechnology, Department of ECE and others engaged in product development to name a few, Bioremediation kit PETROZAP (Patented) for Hydrocarbon degradation; Ayur Aqua (Patented) a herbal water; a Integrated Bioreactor for efficient effluent treatment plant (Patented)

from Biotechnology department. In ECE department, a dental model was developed for the analysis of Bite force measurement after surgery (Patented); "Health monitoring system of Rail Wheel model using optical sensors" (patented), "Design and Development of Fiber-bragg Grating sensing system for monitoring hand grip muscle fatigue (Patented), etc., In this way our research is interwoven with core academic themes, science, technology and applied skills in society.

The research coordinator under the able guidance of our Principal, Dr. N. Kannan, conducted research counselling to all faculty of all the engineering domains to promote, motivate and assist in writing the research proposal,

the counselling was successful in motivating staff members to submit their research proposals to various funding agency, it is worth to mention that, Karnataka State Council for Science and Technology has sanctioned 13 projects in 44 SPP series and 14 projects in 45th SPP series to the students.

In order to serve in meaningful ways, our research as reported across the department here reflects a range of theoretical and methodological orientations and often incorporates interdisciplinary approaches to develop technology-based solutions to the real-time problems.

EDITORIAL TEAM

Sandesh Committee

1. Dr. B. K. Manjunatha   - Convener
2. Dr. Kathiravan   - Member
3. Dr. Indulekha John   - Member
4. Prof. Sandhya Rani V   - Member
5. Prof. Shruthi K   - Member
6. Dr. Nagashree Bhat   - Member
7. Prof. Jessy Koshy   - Member Secretary

Department Coordinators

Name	Department	Name	Department
Prof. Shruthi K	CSE	Prof. Arun Selvi K	AIML
Prof. Sandhya Rani V	ISE	Prof. A. Sahana	MBA
Prof. Jayaraj N	ECE	Prof. Mridula Shukla	MCA
Prof. Poornima M	EEE	Dr. Nagashree Bhat	MAT
Dr. Indulekha John	BT	Dr. Shipra Bhati	CHE
Prof. Anup M	ME	Prof. Leela Rahini	PHY
Prof. Prashanth T S	CE	Mr. Bheemeswara Reddy	Placement
Prof. Ashwini C R	AE	Mr. Mahesh G	Sports
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