

K S R INSTITUTE FOR ENGINEERING AND TECHNOLOGY**DEPARTMENT OF BIOMEDICAL ENGINEERING****VISION**

To produce crudite Biomedical engineers ,Researchers and Enterpreneurs with ethical values to meet the global challenges.

MISSION

- DM1:** Impart quality education to enhance problem solving skills, leadership qualities and team sprit through teaching and learning process with ethical responsibilities.
- DM2:** Enrich interdisciplinary skills by providing state of the art laboratories and facilities.
- DM3:** Enhance research and entrepreneurship skills with social responsibilities to meet social needs.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- PEO 1: Core Competency:** Graduate will apply their skills in solving challenges in Biomedical Engineering field through the core formation and knowledge acquired in engineering and biology.
- PEO 2: Professionalism :** Graduate will exhibit leadership skills and decisions making with social and ethical responsibilities and communicate effectively in multidisciplinary environment.
- PEO 3: Higher studies and Entrepreneurship:** Graduate will engage in higher studies and continue to develop an entrepreneurial attitude to expand and sustain their technical competence through lifelong learning opportunities.

PRANAA
Association of Biomedical Engineering

Department Association called “PRANAA” was formed in the year 2021 In order to provide a platform for the students and faculty to present and share their ideas, thoughts and findings and to conduct expert lectures, seminars, workshops, symposiums, conferences etc. This also aims in bringing pioneers in Biomedical Engineering minds to drive them towards the excellence in Biomedical Engineering.

- Department of Biomedical Engineering & "PRANAA" - Association of BME, organized **“INAUGURAL FUNCTION”** on 26.08.22. The Resource person Dr. Ashok Vajravelu B.E.,M.E., Ph.D., Lecturer, Faculty of Electrical and Electronics Engineering, University Tun Hussein Onn Malaysia(UTHM), Malaysia.
- Department of Biomedical Engineering & "PRANAA" - Association of BME, organized Seminar on **“DESIGNING CONCEPT TOWARDS THE IDENTIFICATION OF BLOOD SUGAR”** on 26.08.2022 .The Resource person Dr. Ashok Vajravelu B.E.,M.E., Ph.D., Lecturer, Faculty of Electrical and Electronics Engineering, University Tun Hussein Onn Malaysia(UTHM), Malaysia.
- Department of Biomedical Engineering & "PRANAA" - Association of BME organized **TECHNICAL EVENT** on 27.08.2022 .The Resource person Mr. A.G.Kannan B.E., Biomedical Engineer, Infinity Biomedical, Coimbatore.
- Department of Biomedical Engineering & "PRANAA" - Association of BME, organized Seminar on **“FIELD WORK OF BIOMEDICAL ENGINEERS AND JOB OPPORTUNITY ”** on 13.09.22. The Resource person Mr.M.Sarvesh Kumaran B.E., Field Service Engineer, The Advanced Medical Systems Inc., Chennai.
- Department of Biomedical Engineering & "PRANAA" - Association of BME, organized Seminar on **“3D MODELING AND BIO PRINTER”** The Resource Person Mr.G.Guru Prasandh B.E., CEO & Founder, Medsby Healthcare & Engineering Solutions, Coimbatore.
- Department of Biomedical Engineering & "PRANAA" - Association of BME, organized Seminar on **“OPPORTUNITIES IN HEALTH CARE SECTOR”** on 24.09.2022. The Resource Person Mr.G.Nithiyaganapathy B.E., Sales Executive, Unicorn Draeger, Coimbatore.
- Department of Biomedical Engineering & "PRANAA" - Association of BME, organized Seminar on **“OVERVIEW IN HEALTHCARE MANAGEMENT”** on 24.09.2022. The Resource Person Mr.P.Shyam Sundar B.E., Biomedical Engineer, Apollo Healthcare Pvt Ltd, Chennai.
- Department of Biomedical Engineering & "PRANAA" -Association of BME, organized Seminar on **“PREPARING FOR PLACEMENT”** on 22.10.2022. The Resource Person Ms. Shangamithra B.E., Data Manager, Zifo Technologies, Chennai.
- Department of Biomedical Engineering & "PRANAA" -Association of BME, organized Seminar on **“ENTREPRENEURSHIP”** on 22.10.2022. The Resource Person Ms. Soundravalli B.E., Programmer Analyst, Zifo Technologies, Chennai.
- Department of Biomedical Engineering & "PRANAA" -Association of BME, organized Workshop on **“ANATOMY AND PHYSIOLOGY”** on 31.10.2022. The Resource Person Dr.S.Angelie Jessica BDS, DHM, MSc.,Reader and Head,Department of Anatomy,KSR Institute of Dental

- Department of Biomedical Engineering & "PRANAA" -Association of BME, organized Technical Event on "**TECHNICAL QUIZ**" on 31.10.2022. The Resource Person Dr.R.Mukilan BDS, MSc, PhD Reader and Head, Department of Physiology, KSR Institute of Dental Science and Research, Tiruchengode.
- Department of Biomedical Engineering & "PRANAA" -Association of BME, organized Seminar on "**JAPANESE LANGUAGE AND ITS JOB OPPORTUNITIES**" on 04.11.2022. The Resource Person Ms. Madhuvanthi Trainer & Founder, Japanese Language Centre, Chennai.
- Department of Biomedical Engineering & "PRANAA" -Association of BME, organized Seminar on "**LEARNING METHODOLOGY**" on 19.11.2022. The Resource Person Ms. N.Sudhavani M.A., M.Phil., Entrepreneur,Soft Skill Trainer,Erode.
- Department of Biomedical Engineering & "PRANAA" -Association of BME, organized Seminar on "**LATEST TRENDS IN MEDICAL DEVICES DESIGN**" on 26.11.2022. The Resource Person Ms. M.Kamali Aishwarya B.E., Developer - Testing, Wipro Limited,Chennai.
- Department of Biomedical Engineering & "PRANAA" -Association of BME, organized Seminar on "**MEDICAL IMAGE PROCESSING**" on 26.11.2022. The Resource Ms. M.Yugasri B.E., Programmer Analyst, Zifo Technologies, Chennai.
- Department of Biomedical Engineering & "PRANAA" -Association of BME, organized Seminar on "**MODERN HEALTHCARE DEVICES**" on 26.11.2022. The Resource Ms. B.Preethi B.E.,Research Analyst, Zifo Technologies, Chennai.

(Co-curricular Activities – Intra College level)
LIST OF STUDENTS PARTICIPATED IN PAPER PRESENTATION

S.No	Name of the student	Year / Semester	Title of the paper presentation	Name of the Organization	Date
1.	P.DHAYANITHI	II/III	MINIATURIZATION IN BIOMEDICAL ENGINEERING-NATIONAL LEVEL BIOMED BRAINSTROM 2k22	DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE	27.09.2022
2.	R.G. PREMKUMAR	II/III	MINIATURIZATION IN BIOMEDICAL ENGINEERING-NATIONAL LEVEL BIOMED BRAINSTROM 2k22	DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE	27.09.2022
3.	S.NITHEESHKUMAR	II/III	THE DA VINCI SYSTEM NATIONAL LEVEL BIOMED BRIANSTROM 2k22	DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE	27.09.2022
4.	R.ARULKUMAR			DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE	27.09.2022
5.	K.KARTHIKRAJA	II/III	THE DA VINCI SYSTEM NATIONAL LEVEL BIOMED BRIANSTROM 2k22	DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE	27.09.2022
6.	M.SENTHAMILMARAN			DHANALAKSHMI SRINIVASAN ENGINEERING COLLEGE	27.09.2022

(Co-curricular Activities – Inter College level)**LIST OF STUDENTS PARTICIPATION EXTRA CURRICULAR ACTIVITIES**

S.No	Name of the Student	Year / Semester	Name of the event	Name of the Organization	Date
1.	R.BHARATHKUMAR	II/III	SUPER DANCERS	ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
2.	T.SANJAY	III/V		ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
3.	M.MEIAZHAGAN			ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
4.	A.MOHANRAJ			ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
5.	R.RITHIKA	II/III	PAINTING (III PRICE)	ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
6.	V.JEEVITHA	II/III	VEGETABLE CARVING (II PRICE)	ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
7.	M.MEIAZHAGAN	III/V	PAINTING	ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
8.	S.DHIVYA	II/III	PHOTOGRAPHY	ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
9.	R.BHARATHKUMAR	II/III	PHOTOGRAPHY	ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
10.	C.MONISH	III/V	PHOTOGRAPHY	ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
11.	R.MUGILAN	III/V	PHOTOGRAPHY	ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
12.	R.BHARATHKUMAR	II/III	SHORT FILM (WINTER BLUES) I PRICE	ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
13.	C.MONISH	III/V		ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
14.	R.MUGILAN	III/V		ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
15.	P.KOHILA	II/III	YOUTH TALK	ICT ACADEMY	26.09.2022
16.	G.PRADEEP	II/III	PHOTOCONTEST	HINDUSTAN INSTITUTE OF TECHNOLOGY	29.9.2022
17.	R.HEERA	II/III	PAINTING	ERODE SENGUNTHAR ENGINEERING COLLEGE	20.10.2022, 21.10.2022
18.	R.BHARATHKUMAR	II/III	PHOTO CONTEST	PSG COLLEGE OF TECHNOLOGY	29.10.2022
19.	C.MONISH	III/V	PHOTOCONTEST	PSG COLLEGE OF TECHNOLOGY	29.10.2022
20.	T.SANJAY	III/V	PHOTOCONTEST	PSG COLLEGE OF TECHNOLOGY	29.10.2022
21.	R.BHARATHKUMAR	II/III	TREASURE HUNT	PSG COLLEGE OF TECHNOLOGY	29.10.2022
22.	C.MONISH	III/V	TREASURE HUNT	PSG COLLEGE OF TECHNOLOGY	29.10.2022
23.	T.SANJAY	III/V	TREASURE HUNT	PSG COLLEGE OF TECHNOLOGY	29.10.2022
24.	R.BHARATHKUMAR	II/III	CRIC QUIZ	PSG COLLEGE OF TECHNOLOGY	29.10.2022
25.	C.MONISH	III/V	CRIC QUIZ	PSG COLLEGE OF TECHNOLOGY	29.10.2022
26.	T.SANJAY	III/V	CRIC QUIZ	PSG COLLEGE OF TECHNOLOGY	29.10.2022
27.	R.BHARATHKUMAR	II/III	SPELL BEE	PSG COLLEGE OF TECHNOLOGY	29.10.2022
28.	C.MONISH	III/V	SPELL BEE	PSG COLLEGE OF TECHNOLOGY	29.10.2022
29.	T.SANJAY	III/V	SPELL BEE	PSG COLLEGE OF TECHNOLOGY	29.10.2022

LIST OF STUDENTS PARTICIPATED IN WORKSHOP

S.No	Name of the Student	Year / Semester	Title of the event/workshop	Name of the organisation	Date
1	R.BHARATHKUMAR	II/III	WORKSHOP-REAL TIME TECHNOLOGY OF IoT IN HEALTHCARE	MAHENDRA COLLEGE OF ENGINEERING	23.09.2022
2	G.PAVITHRAN			MAHENDRA COLLEGE OF ENGINEERING	23.09.2022
3	N.PRIYADHARSHINI			,MAHENDRA COLLEGE OF ENGINEERINNG	23.09.2022
4	N.YAGNASHRI			MAHENDRA COLLEGE OF ENGINEERING	23.09.2022
5	K.ADHITYA			MAHENDRA COLLEGE OF ENGINEERING	23.09.2022
6	G.VINOTH	III/V	WORKSHOP-BRAIN COMPUTED INTERFACE	Dr.N.G.P INSTITUTE OF TECHNOLOGY	04.11.2022
7	S.DINESH			Dr.N.G.P INSTITUTE OF TECHNOLOGY	04.11.2022
8	S.RUBA SREE			Dr.N.G.P INSTITUTE OF TECHNOLOGY	04.11.2022
9	M.KEERTHANADEVI			Dr.N.G.P INSTITUTE OF TECHNOLOGY	04.11.2022
10	I.GOBINESHWARI			Dr.N.G.P INSTITUTE OF TECHNOLOGY	04.11.2022
11	SR. GOWSHEEBA			Dr.N.G.P INSTITUTE OF TECHNOLOGY	04.11.2022
12	S.MAHESHWARI	III/V	CONFERENCE-EMPOWER 2022	IIT MADRAS RESEARCH PARK	15.10.2022

EDITORIAL BOARD

Principal		Dr.M.VENKATESAN
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STUDENT EDITORS	Third Year	A.VASANTH
	Second Year	R.BHARATHKUMAR

Program Outcome for Biomedical Engineering

PO 1: Engineering Knowledge: Apply knowledge of mathematics, science and engineering principles to solve problems in the domain of Electronics and Communication Engineering.

PO 2: Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 3: Design/Development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO 4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO 5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO 6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess Societal, Health, Safety, Legal and Cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO 7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge and need for sustainable development.

PO 8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 11: Project management and finance: Demonstrate Knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO 12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSO)

PSO1: Medical Device Design and Development: Design and develop medical devices to enhance the quality of life for the end user by applying fundamentals of Biomedical Engineering.

PSO2 : Computing and Automation Skills: Apply software skills in developing algorithms for solving healthcare related problems.