

# ERODE SENGUNTHAR ENGINEERING COLLEGE



(An autonomous Institution)

(Approved by AICTE, New Delhi, Permanently Affiliated to Anna University, Chennai,
Accredited by National Board of Accreditation (NBA), New Delhi
& Accredited by NAAC with 'A' Grade)
Thudupathi (PO), Perundurai, Erode - 638 057

# Department of Biomedical Engineering



#### **ASSOCIATION ACTIVITIES**

The inauguration of BME association (**MED WINGS**), for the academic year 2021-22 was held on 24.12.2021. Ms.M. Subhashini, Application specialist GE Healthcare (Wellesta) inaugurated BME association. Guest lecture I on the topic "**ROLE OF APPLICATION SPECIALIST AND BASICS OF ULTRASOUND**" was conducted on 24.12.2021.





#### PAPERS PUBLISHED

- Dr.M.Sundaram, Professor, Biomedical Engineering has participated in conference titled "Grey wolf optimization with deep recurrent neural network for epileptic seizure detection in EEG signals" in the Journal of Wiley Research.
- Dr.M.Sundaram, Professor, Biomedical Engineering has published a paper titled "Contour and texture based approaches for dental radiographic and photographic images in forensic identification" in the Journal of Springer Edition Research.
- Dr.M.Sundaram, Professor, Biomedical Engineering has published a paper titled "Deer hunting optimization with deep neural network for automated arythmia diagnosis in ECG Signals" in the Journal of IEEE explore.
- Dr.M.Sundaram, Professor, Biomedical Engineering has published a paper titled "Weighted 1D-local binary pattern features and Taylor-Henry gas solubility optimization based Deep Maxout network for discovering epileptic seizure using EEG" in the Journal of Elsevier Research.

#### STTP ATTENEDED

- Mrs.M.Dhivya, Assistant Professor, Biomedical Engineering has completed NPTEL eight week Online Short term Certification course on "Biomechanics of joints and orthopedic implants" and certified as elite on august to October 2021.
- Mrs.K.K.Leka, Assistant Professor, Biomedical Engineering has completed NPTEL eight week Online Short term Certification course on "Biomechanics of joints and orthopedic implants" and certified as elite on august to October 2021.

#### FACULTY DEVELOPMENT PROGRAMME ATTENEDED

- Mr.K.Balasubramanian, Assistant Professor, Biomedical Engineering have attended AICTE Training and Learning (ATAL) Academy Online FDP on "Biosimilar Technology" conducted by, Sardar Patel Institute of Technology from 23.11.2020 to 27.11.2020.
- Mrs.M.Dhivya, Mrs.K.K.Leka, Ms.M.Mohanavalli, Assistant Professor, Biomedical Engineering have attended AICTE Training and Learning (ATAL) Academy Online FDP on "Instrumentation, Signals and Images for the Evaluation of Physiological Systems" conducted by, National Institute of Technology Tiruchirappalli from 16/08/2021 to 20/08/2021.
- Mrs.K.K.Leka, Ms.M.Mohanavalli, Assistant Professor, Biomedical Engineering have attended AICTE Training and Learning (ATAL) Academy Online FDP on "Artificial Intelligence Applications in Medical Diagnosis" from 04/10/2021 to 08/10/2021 at B.S Abdur Rahman Crescent Institute of Science and Technology.
- Mrs.M.Dhivya, Mrs.K.K.Leka, Assistant Professor, Biomedical Engineering have attended AICTE Training and Learning (ATAL) Academy Online FDP "Significance of Biomedical Engineering in Covid-19" from 20/09/2021 to 24/09/2021 at GOVERNMENT POLYTECHNIC MIRAJ.
- Ms.N.Ageela, Assistant Professor, Biomedical Engineering has attended AICTE Training and Learning (ATAL) Academy Online FDP on "Next-Generation Applications of Artificial Intelligence and Machine Learning for Smart IoT Applications (NxGA-AIM

2021)" 18/10/2021 to 22/10/2021 at New Horizon College of Engineering.

- Ms.N.Ageela, Assistant Professor of Biomedical Engineering has participated AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Application of AI, ML and DL in Smart Healthcare" from 27/09/2021 to 01/10/2021 at Maulana Abul kalam Azad University of Technology, WB.
- Ms.N.Ageela, Assistant Professor of Biomedical Engineering has participated in Five days Faculty Development program on "Recent advanced technologies for the development of biosensors and their applications" organized by Department of Biotechnology at Sapthagiri College of Engineering from 27/09/2021 to 01/10/2021.
- Mrs.M.Dhivya, Assistant Professor of Biomedical Engineering has completed AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Heart Rate Variability-Monitoring, Analysis and diagnosis" from 25/10/2021 to 29/10/2021 at Model Engineering College.
- Dr. Mr.M.Sundaram, Professor of Biomedical Engineering has completed AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Recent Innovative Trends in Biomedical Engineering and Technology" from 13/12/2021 to 17/10/2021 at MEPCO Engineering College.

#### WEBINARS ATTENDED BY FACULTY

- Mrs.M.Dhivya, Mrs.K.K.Leka, Assistant Professor, Biomedical Engineering has attended a webinar on "Licensing / Commercialization of Patents / Technologies" Organized by Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Chennai-62 on 12.10.2021.
- Mrs.K.K.Leka, Assistant Professor, Biomedical Engineering attended a Workshop on "Entrepreneurship and Innovation as Career Opportunity" on 03.11.2021 at Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai-62.
- Mrs.M.Dhivya, Mrs.K.K.Leka, Assistant Professor, Biomedical Engineering attended a Webinar on "HFNC to enhance Safe Anesthesia during pre operative period" on 09.10.2021 organized by Indian society of anesthesiologist and mindray.
- Mrs.K.K.Leka, Assistant Professor, Biomedical Engineering has attended a webinar on "Integration of Information Technology & Medical Equipments - Emerging Trends" Organized by Indian Biomedical Skill Consortium on 23.10.2021

#### TRAINING ATTENDED BY FACULTY

- Mrs.K.K.Leka and Ms.N.Ageela have attended a hospital training in Maruthi Medical Centre and Hospital on 18.12.2021
- Mrs.K.K.Leka and Ms.N.Ageela have attended a hospital training in Abhi SK Hospital on 25.12.2021
- Mrs.M.Dhivya and Mr.K.Balasubramanian have attended hospital training in Mani Hospital on 18.12.2021.
- Mrs.M.Dhivya and Mr.K.Balasubramanian have attended hospital training in Ganesh Scans on 25.12.2021.
- Ms.M.Mohanavalli has attended online internship training program on Ventilators at Helix Pvt Ltd, Bangalore on 16.05.2021 to 17.05.2021
- Ms.M.Mohanavalli has attended online internship training construction of Model Ventilators at Helix Pvt Ltd, Bangalore on 23.05.2021 and 30.05.2021.



# STUDENTS INTERNSHIP

- Tamilselvan.K.C, Vinoth.R, Naveen kumar.R, satheesh,V, Loganathan.A, of Final Year Biomedical Engineering have undergone an Online Summer Internship Programme (OSIP) organized by National Skill Institute from July 7<sup>th</sup> to July 12<sup>th</sup> 2020.
- A.Vignesh of Final Year Biomedical Engineering has undergone an Internship Programme in Ultraserve Systems from 20<sup>th</sup> October to 20<sup>th</sup> November 2021.
- Krishnan.A and Loganathan.A of Final Year Biomedical Engineering have undergone an Internship Programme in Shree Imaging Systems from 18<sup>th</sup> October to 18<sup>th</sup> November 2021.
- Prathap.K of Final Year Biomedical Engineering has undergone an Internship Programme in Shree Imaging Systems from 22<sup>nd</sup> October to 22<sup>nd</sup> November 2021.
- Manikandan.C and Hariharan.M of Final Year Biomedical Engineering have undergone an Internship Programme in Emglitz from 8<sup>th</sup> november to 22<sup>nd</sup> November 2021.
- Ranjith Kumar.G and Naveen Kumar.T of second Year Biomedical Engineering have undergone an Hospital training in Adithiya Laboratory from 25<sup>th</sup> November to 1<sup>st</sup> December 2021.
- Kalaivani.M, Sureshkumar.K and Faiyaz.M of second Year Biomedical Engineering have undergone an Hospital training in Maruthi Medical Centre and Hospital from 05.01.22 to 11.01.22.
- Ramya.S, Sanjay.R, SathyaRam.C and Sasi Kumar.E of third Year Biomedical Engineering have undergone an Hospital training in SRM Hospital from 03.01.22 to 09.01.22.
- A.R.Manoj, P.Prasanth, R.Vikram, S.Vignesh, and B.Yogeshwaran of third Year Biomedical Engineering have undergone an Hospital training in Ganesh Scans from 04.01.22 to 15.01.22.
- Hemalatha.S, Sanjeevi Sivan.R, Thinakaran.S and Maheshwaran.R of third Year Biomedical Engineering have undergone an Hospital training in Abhi SK Hospital from 10.01.22 to 17.01.22.
- Dharani.K, Janani.V, and Gokilashree.M of second Year Biomedical Engineering have undergone an Hospital training in Abhi SK Hospital from 03.01.22 to 09.01.22.
- Pavithra.s and Umay Salma.S of second Year Biomedical Engineering have undergone an Hospital training in Abhi SK Hospital from 03.01.22 to 13.01.22.
- Ilamvaluthi.S and Ragul.M of second Year Biomedical Engineering have undergone an Hospital training in Shifa Hospital from 07.01.22 to 13.01.22.
- R.Praveen of second Year Biomedical Engineering has undergone Hospital training in Thiruvengadam Hospital from 06.01.22 to 12.01.22.
- Raj Aryan of second Year Biomedical Engineering has undergone Internship training in Unique Technologies from 13.01.22 to 17.01.22.
- 37 students of of third Year Biomedical Engineering have undergone an Internship program in Medicure Ltd from 03.01.22 to 06.01.22



### STUDENTS PAPER PRESENTATION

- V.Satheesh of Final year Biomedical engineering has presented a paper on "Signal Procssing and Communication Technologies 2020" at National level symposium on oct 28<sup>th</sup> 2020 held at Kamaraj college of engineering and technology, Coimbatore.
- T.Dharshini, and R.Priyadhrshini of Final year Biomedical engineering have presented a paper on "Non invasive Glucometer" at National level symposium on Feb 21<sup>st</sup> 2020 held at KPR institute of engineering and technology, Coimbatore.
- V.Satheesh, Final year Biomedical engineering has presented a paper on "Paper Versa" at National level symposium on Feb 26<sup>th</sup> 2020 held at Kongu Engineering College, Erode.
- R.Vinoth, and K.C.Tamilselvan of Final year Biomedical engineering have presented a paper on "Proton beam theraphy" at National level symposium on Feb 21<sup>st</sup> 2020 held at KPR institute of engineering and technology, Coimbatore.
- K.Prathap, and R.Naveen Kumar of Final year Biomedical engineering have presented a paper on "Non invasive Glucometer" at National level symposium on Feb 21<sup>st</sup> 2020 held at KPR institute of engineering and technology, Coimbatore.
- K.Sujithra and S.Harini of third year Biomedical engineering have presented a paper on "Biocommunication" at National level symposium on Sep 25<sup>th</sup> 2021 held at Kongunadu college of engineering and technology, Namakkal.
- Barath.R of third year Biomedical engineering has presented a paper on "Artificial Limb rehabilitation robotics" at National level conference on march 25<sup>th</sup> 2021 held at SRM TRP engineering college, Trichy.
- Ramya.S and Thirsha.W.G of third year Biomedical engineering have presented a paper on "Telehealth technology" at National level symposium on Sep 25<sup>th</sup> 2021 held at Kongunadu college of engineering and technology, Namakkal.
- Nivetha.K of second year Biomedical engineering have presented a paper on "" at National level symposium on 27<sup>th</sup> Aug 2021 held at Pavai engineering College, Namakkal.
- Ramya.S and Manoj.A.R of third year Biomedical engineering have presented a paper on "Nano Robotics" at National level symposium on Feb 14<sup>th</sup> 2020 held at SNS College of technology, Coimbatore.

# STUDENTS WORKSHOP/SEMINAR PARTICIPATION

- Nivetha A of second year Biomedical Engineering has attended the one day national webinar on "public relation during covi-19" organized by mandsaur university on 18<sup>th</sup> oct 2020.
- Nivetha A of second year Biomedical Engineering has attended the webinar on "Justice V.R.Krishna Iyer: An activist Judge" organized by Vidyavardhaka Law College on 18<sup>th</sup> Nov 2020.
- Shriram S and Preethi.S, Ranjith.R of third year biomedical engineering have completed the online seminar on "Radiography past and present" organized by Siemens Healthineers conducted on 10<sup>th</sup> november 2020.



- B.Bharath, M.Hariharan, S.Sakthivel of final year Biomedical Engineering have attended a live workshop on "Oxygen Concentrator" at Bannari Amman Institute of Technology, on 4<sup>th</sup> Sep 2021.
- C.Boopalan, M.hariharan, S.Sakthivel of final year Biomedical Engineering have attended a webinar on "Licensing / commercialization of patents/technologies" at Vel tech Rangarajan Dr, Sagunthala R&D Institute of Science and Technology, on 12.102021.
- Manikandan.C, D.Sundary, T.M.Pavithra of final year Biomedical Engineering have attended a webinar on "Licensing / commercialization of patents/technologies" at Vel tech Rangarajan Dr, Sagunthala R&D Institute of Science and Technology, on 12.102021
- A.Vignesh, K.Prathap of Final year Chemical Engineering has attended the webinar series conducted by Allan Bradley SLC-500 PLC Programming& Control offered by National Skill Training Institute Chennai on 12th July 2019
- Gokulraj.P, Harini.S, Deepika.R, THirsha.W.G, Sharmila.M, Mohankumar.T, Vijay.A of third year biomedical engineering have completed the online seminar on "Recent Advancement In Computational Biomechanical Modelling Of Medical Prosthetic Implants" organized Dr.NGP institute of technology on 12<sup>th</sup> November 2021.
- Ramya.S and Manoj.A.R of third year Biomedical engineering have presented a poster on "Nano Fibres" at National level symposium on Feb 15<sup>th</sup> 2020 held at SNS College of technology, Coimbatore
- Karthick.K of third year biomedical engineering has completed the online webinar on "Electorsurgical Unit" organized by Prashan medical technologies conducted on 20<sup>th</sup> september 2021.
- Karthick.K of third year biomedical engineering has completed the online webinar on "Medical Devices Procurement & Maintenance Management" organized Indian Biomedical Skill Consortium on 23.10.2021

#### ONLINE COURSES ATTENDED BY STUDENTS

- Shriram S and Preethi.S of third year biomedical engineering have completed the online course on "CT system Maintenance" conducted on 10<sup>th</sup> November 2020.
- Ranjith.R, Vignesh.S, Santhoshkumar.K Sujithra.K, Yalini.S of third year biomedical engineering have completed the online course on "Radiation Safety and Protection" conducted on 12<sup>th</sup> june 2021.
- Prathap.K of final year Biomedical engineering has attended Course on "Principles of Computed Tomography" Online course offered by Canon Medical Systems Learning on 12th July 2021.
- Nivetha.K of Second year Biomedical engineering has attended Course on "Broadband Database Management System" Online course offered by Great Learning Academy on 25th July 2021.
- Vignesh.A final year Biomedical engineering has attended Course on "Java Programming Masterclass for Software Developers" Online course offered by ucamedy on 8<sup>th</sup> march 2021.

# **ONLINE TRAINING ATTENDED BY STUDENTS**

 Sowndharya.V, Yalini.S, Snaga.P, R.Bharath of third year biomedical engineering have completed the online training on "Java Programming and advanced Python" From August 8th to September 3rd, 2020 conducted by ED Spread.

#### STUDENTS JOURNAL PUBLICATIONS

- Satheesh. V final year Biomedical engineering has published a journal on "Review on Muscle Movement Recording System Using EMG" in Journal Remote sensing GIS & Technology on September 2020.
- Prathap.K final year Biomedical engineering has published a journal on "A Review on Positron Emission Tomography" in Journal communication engineering and innovations on September 2020.

