



KPR Institute of Engineering and Technology

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Highlights of this month

January 24

IBSC Professional Society
Membership Drive

January 26

Membership Drive Meet for
the Professional Society
'Biomedical Engineering
Society of India (BMESI)

January 29

Project Ideas to Business
Model

"We are Engineers for Doctors"

Biomedical Engineering is one of the premier Engineering disciplines among technocrats since it merges Healthcare Technology with Electronics and Software technologies including Artificial Intelligence, Machine Learning, Robotics in Medicine, Bioinformatics, Prosthetic Engineering etc. to serve better to the human community with advance and continuously upgrading technologies. In KPRIET, we nourish our students with advance laboratories like Bio-signal processing, Diagnostics and Therapeutic Equipment, Human Anatomy and Physiology, Biomedical Instrumentation to learn by practicing. Hospital training and internship are arranged with leading multispecialty hospitals and biomedical industries to facilitate the students for better career. Research activities are vibrant with publications and patents in the recent trends.

Dr. D. Ganeshkumar HoD/BME

BIO-SCOPE

Monthly Newsletter: Department of Biomedical Engineering

EDITORIAL BOARD

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FACULTY COORDINATOR

Dr. S. Saranya Devi, AP/BME

STUDENT COORDINATORS

K.G. Aashika (IV BME)
M. A. ALAN WINSTON (III BME)
A. K. Shwetha (II BME)

IN THIS ISSUE

About the Institution & Department
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Faculty Contributions
Student Placement Activities



About KPRIET

KPR Institute of Engineering and Technology (KPRIET), founded by Dr. K. P. Ramasamy, stands out as a leading institute of academic excellence by imparting technical, intellectual and professional skills to students. The institute, with its diverse and energetic community of students offers a distinguishing blend of some of the premium graduate, undergraduate and research programs, talented faculty, world class amenities and a residential campus set on a sprawling 150 acres of lush green campus.

While students at KPRIET immerse themselves in academics, the institute has a lot in store for them outside the classroom. Student life includes participation in sports, co-curricular activities and cultural. In short, at KPRIET, students will find an academic and social environment where everyone- from faculty members to peer's support shape their future.

KPRIET is a home to artistically designed buildings with state of the-art computer and internet facilities, modern workshops, seminar halls, auditoriums and well stocked libraries, sports and games fields in addition to an indoor badminton court and gymnasium.

KPRIET has a faculty strength of 227 with a faculty student ratio of 1:15. Out of the total, 97 faculty members PhDs. and 102 are in the process of completing their PhDs. As an exemplary institution of learning, KPRIET follows an admission policy that strongly favours merit, even as it enables access to education for students from all strata of society through appropriate scholarships. The Institution boasts of a strong alumni network with alumni events held every year serving as a platform for past students to give back to KPRIET and share their experiences with its present fellow students.

About the Department

The Department of Biomedical Engineering of KPR Institute of Engineering and Technology, Coimbatore was established in the year 2017 with an annual intake of 60 students. The Department has highly qualified faculty members with Ph. D. and M. E. / M. Tech. under various specialize such as Biomedical Signal and Image Processing, Medical Electronics, Healthcare Data Analytics, Biomaterials, Regenerative medicine and Nanoscience.

The faculty members contribute to academic development by publishing books / journals, products, patent filing and presenting papers in International and National Conferences. The Department of Biomedical Engineering signed MoUs with the reputed industries like Aravind Eye Care Hospital, Helix Private Ltd., GEM Hospitals, Ganga Medical Center and Hospital, Masonic Medical Centre for children, Waxwing Medical Technologies, Vital Bio-systems to bridge the gap between theory and field practices.

The Department also provides an opportunity for students in improving practical knowledge in the field of Biomedical Engineering and Software skills like MATLAB, LabVIEW, Proteus, Pspice simulation

through KPI Centre of Excellence, in addition to Communication and Presentation skills. The students have to undergo Industrial Training and Industrial Visit to facilitate them to take up industrial live projects to understand the industry needs. The Department of Biomedical Engineering as well as faculty members has lifetime membership in various Professional Societies like ISTE, BMESI and IBSC. The Department of Civil Engineering has various Students Chapter like ISTE and BMESI to gain knowledge through various programmes conducted by these bodies across the Nation.

Vision of the Department

Be at the forefront in providing multidisciplinary education in engineering, technology and biological sciences, thereby providing our students, the future engineering professionals with the skills required to develop avant-garde devices and technologies to assist medical professionals in providing exceptional healthcare.

Mission of the Department

The Mission of the Department is to

- Establish new teaching paradigms to converge biomedical engineering education to unveil creativity and innovation in clinical health care.
- Build an integrated team of biomedical engineering community to nurture cutting-edge technologies through research and development.
- Collaborate and promote partnership with healthcare industry to enrich employability skills and be in phase with their progress.
- Impart moral values, inculcate ethical behaviour and practice life-learning.

Programs Organized

Event: 1

| | |
|----------------------|--|
| Date of the Event | : 24.01.2022 |
| Time | : 12.30PM – 01.00PM |
| Event | : Webinar |
| Title of the Event | : IBSC Professional Society Membership Certification Benefits |
| Beneficiaries | : II-year, III-year and IV-year BME Students |
| Objective | : 1. About the IBSC Society 2. Courses and Certifications offered by the IBSC group. 3. Benefits regarding undergoing the courses and certifications offered by the Society. |
| KPR BME Participants | : 53 |
| Speaker | : Ms. S. Saranya Devi Assistant Professor, AP / BME KPRIET, Coimbatore |
| Faculty Coordinator | : Ms. S. Saranya Devi, AP / BME |







KPR Institute of Engineering and Technology
 Laxmi Bazar-4, Warananagarpet-641 105
 Arakkudi Road, Aravali, Coimbatore.

Department Of
 Biomedical Engineering

IBSC Professional Society

Membership Drive

The Department of Biomedical Engineering is a partner in IBSC to put in place an equivalence system of value-based assessment covering educational training, work experience and competency possessed by practitioners of biomedical engineering skills.

IBSC Certification Benefits:
 BME students / engineers will learn and gain in-depth knowledge on all medical devices, calibration and relevant areas.
 IBSC certification will give recognition to Indian biomedical engineers based on their years of experience, education and competency levels.

Jan 24, Monday
 12.30 – 1:00pm
<https://meet.google.com/sbg-htpu-uyj>

kpriet.ac.in

 /KPRIETonline

Report:

The Webinar is organized for all KPRIET Biomedical students on 24.01.2022 by 12:30 pm – 01:00pm. I have welcomed the participants and started the session with the introduction to IBSC Professional Society group, courses and certifications offered by the group. 53 Biomedical students have joined the session. Mirudhula has planned to undergo the certification.

The screenshot displays a Google Meet interface during a webinar. The main window shows a presentation slide titled "IBSC Professional Society Membership Drive" from the Department of Biomedical Engineering. The slide includes the following text:

- IBSC Professional Society**
- Membership Drive**
- The Department of Biomedical Engineering is a partner of IBSC to offer an opportunity to all students of the department to become members of the society and enjoy the benefits of membership.
- IBSC Certification Benefits:**
- IBSC as a body / organization will issue a certificate to all members who are successful in completing the certification process.
- IBSC will provide all the necessary facilities to all members who are successful in completing the certification process.
- IBSC will provide all the necessary facilities to all members who are successful in completing the certification process.

The interface also shows a list of participants on the right, including Fathima Safa, 20BM001_AHA..., 20BM009 GAYA..., 18bm040 Priyad..., 20BM046 Satwika, and 19BM017_JANA... A chat window on the right shows messages from participants: "Thank you mam" and "thank you mam". The bottom of the screen shows the Windows taskbar with the time 12:55 PM and date 1/24/2022.

Event: 2

| | |
|----------------------|--|
| Date of the Event | : 26.01.2022 |
| Time | : 12.30PM – 01.00PM |
| Event | : Club Activity - Webinar |
| Title of the Event | : Membership Drive Meet for the Professional Society Biomedical Engineering Society of India (BMESI) |
| In association with | : Student Affairs |
| Beneficiaries | : II-year, III-year and IV-year BME Students |
| Objective | : 1. About the IBSC Society 2. Courses and Certifications offered by the IBSC group. 3. Benefits regarding undergoing the courses and certifications offered by the Society. |
| KPR BME Participants | : Faculty – 12, Students - 151 |
| Speaker | : Ms. M. Swathy Assistant Professor, AP / BME KPRIET, Coimbatore |
| Faculty Coordinator | : Ms. M. Swathy, AP / BME |

Outcome : The event was aimed to bring in an awareness about the services and opportunities provided to the learning community by the professional society 'Biomedical Engineering Society of India (BMESI)'. The session had a detailed discussion about the internship, career guidance and research support from the professional society.

Report (in words) : The Department of Biomedical Engineering in association with the Student Affairs Committee conducted a membership drive meet for the students and faculty members of the institution to deliberate the internship, research. career guidance and developmental support offered by the All-India non-profit making professional society 'Biomedical Engineering Society of India (BMESI)' on 26.01.2022 (Wednesday) from 03.00 PM to 03.30 PM via google meet. The session was focused on the vision and mission of the professional society. The guidance and the financial support extended by the society for enrichment of knowledge in the domain of biomedical engineering to the students and faculty members were discussed in detail. The session also covered the modes through which an individual can acquire membership from the professional society. A brief explanation about the receiving of the information and opportunities through the professional society was also provided.

KPR Institute of Engineering and Technology
Learn Beyond (Autonomous, NAAC "A")

11 years of Academic Excellence

INSTITUTIONS' INNOVATION ON ENGINEERING

INNOVATION CELL

KPRIET

DEPARTMENT OF BIOMEDICAL ENGINEERING

Welcomes you all

Membership Drive Meet for the professional society

BIOMEDICAL ENGINEERING SOCIETY OF INDIA (BMESI)

Presented by
Ms. M.Swathy,
Assistant Professor

Agenda

- Vision and Mission
- Career opportunities
- Higher study guidance
- Remote internship program
- Academic collaboration
- Biomedical databases
- Online courses

26.01.2022
03.00 PM TO 3.30 PM

mdq-prtz-nhu

SUSTAINABLE DEVELOPMENT GOALS

3
4

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LEARN BEYOND

VISION **MISSION** **EXECUTIVE COMMITTEE**

MISSION

- Utilize the special talents and attributes of Student Members, especially engineering imagination, technical expertise, moral responsiveness and social awareness.
- Increase campus awareness of the Chapter and attain greater volume in active membership.
- Encourage students to participate in technical events and collaborate with experts and delegates.
- Plan activities to communicate the recent advances in the field of healthcare

kpriet.ac.in /KPRIETonline

bmesi.org.in

SUSTAINABLE DEVELOPMENT GOALS

3
4

BM009 - M.Swathy KPRIET

| | | |
|-------------------------------------|---|---|
| Event No. | : | 3 |
| Date | : | 25.01.2022 |
| Venue | : | KPRIET |
| Level of the Event | : | State |
| Type of Event | : | Webinar |
| Title of the Event | : | Career Guidance Programme |
| In Association with | : | District Employment and career Guidance Centre, Coimbatore. |
| Resource Persons | : | <ol style="list-style-type: none">1. Ms. J. Aneesha Suraiya, Assistant Engineer, PWD, Coimbatore.2. Dr. Umesh Vasu, Foundar and CEO, Tharam-Thiran Green Energy Flow LLP3. Ms. Nithya Vellingiri, Carrenet Technologies, Coimabatore.4. Mr. Karunakaran, Deputy Director, DECGC, Coimbatore,5. Ms. Sathya Parthvarthy, DEO, Coimbatore. |
| Convener | : | Dr. Sreelatha P, AsP / BME |
| No. of External Participant (Count) | : | Faculty : - Research : - Scholars : - Students : - Others : - |
| No. of Internal Participant (Count) | : | Faculty : 50 Research : - Scholars : - Students : 350 |

Report:

Equal opportunity cell organized a “Career Guidance Programme” on 25.01.2022 (Tuesday) to create awareness among the students about career opportunities in various government and private sectors including IES, UPSC, IBPS, and BHEL etc. The session was addressed by the experts from District employment and Career guidance centre, Coimbatore, Careernet Technologies and Tharam-Thiran Green Energy Flow LLP. Mr. DS. Gunasekaran, Regional Joint Director, delivered inaugural address. Ms. J. Aneesha Suraiya, Assistant Engineer highlighted the different competitive exams regularly conducting by Government. She has narrated the steps to be followed and the application procedures involved in the Technical Government exams. In addition to that, she has shared her experience to the participants and insisted them to be ready for competitive exams. The guest speaker Dr. Umesh Vasu also gave insights to the participants to become good entrepreneur. He expressed his ideas and his own experience about how to get funds for start-ups and how to present proof-of-concept to approach funding agency.

Equal Opportunity Cell
in association with
District Employment and Career Guidance Centre (DECGC), Coimbatore
Organizes
Career Guidance Programme
on 25th January, 2022 (2.30 pm to 4.30 pm)

Guest Speakers

| | | |
|---|--|---|
| <p>INAUGURATION SPEECH Mr. OS. Gnanasekaran Regional Joint Director, Coimbatore Region</p> | <p>GOVERNMENT EXAMS Ms. J. Aneesha Suraiya Assistant Engineer, PWD, Electrical Subdivision, Coimbatore</p> | <p>ENTREPRENEURSHIP FOR ENGINEERS Dr. Umesh Vasu Founder and CEO, Tharam-Thiran Green Energy Flow LLP</p> |
| <p>INTERVIEW SKILLS Ms. Nithya Vellingiri Associate consultant (HR), Careernet technologies, Coimbatore</p> | <p>GENERAL OVERVIEW Mr. Karunakaran Deputy Director, DECGC, Coimbatore</p> | <p>GENERAL OVERVIEW Ms. Sathya Parvathy District employment officer, DECGC, Coimbatore</p> |

Convenor : Dr. P. Sreelatha, AsP / BME, Head - EOC
Program Coordinators : Dr. D. Aravindh, AP (SLG) / Mathematics
Dr. K. Kairajan, Associate Professor / ECE

zoom
shorturl.at/cBL45

KPRIET

Ms. Nithay Vellingiri elaborated the interview skills and tips to the participants to face an interview with full of confidence and asked them to be focused to plan their career accordingly.

In addition to that, she suggested the students to do self-analysis to find out their strengths and weakness. Mr. Karunakaran said that there are plenty of opportunities in government sectors and represented the activities done by the District Employment centre. Ms. Sathyaparvarthy explained about opportunities in state and central government sectors and ends the session by Q&A interaction with the participants. About 400 faculty and student across the departments attended the session. The team Equal Opportunity Cell organized this event.



“Presentation by Resource Person”



“Organizing team during the sessions”

Faculty Contributions

Faculty Publication

| Name | Name of the Journal | Title | Volume No. | Issue No. |
|-------------------------|---|---|------------|-----------|
| Dr. P. Sreelatha (2021) | Bioscience Biotechnology Research Communication | Smart and Effective Environment Monitoring Using Internet of Things | 14 | 07 |

Faculty Patent

| Name | Title | Other Information |
|-------------------------|---------------------------------|--|
| Dr. P. Sreelatha (2021) | Handy device for face detection | (Indian Design Patent Published Design number 351214-001, Class 10-05, Journal No 49/2021) |

Faculty Contributions

FDP/Workshop/Seminar Attended

| Name of the Faculty | Name of the Workshop/ FDP/Internship | Organized by | Date |
|-------------------------|---|--|-----------------------------------|
| Mrs. R. Rajeshwari | Hospital Internship | Aravind Eye Hospital, Coimbatore | 01- 12- 2021 to 16-12- 2021 |
| Mrs. M. Swathy | Symposium: ADVANCED MATERIALS FOR SUSTAINABLE FUTURE | Department of Physics, Ramco Institute of Technology, Rajapalayam - 626 117, Tamil Nadu, India | 07.01.2022 to 08.01.2022 |
| Ms. Priya Darshini B | Recent trends and Challenges in Image processing and Computer Vision | ATAL - University School of Information and Communication Technology, Guru Gobind Singh IP University | 29/11/2021 - 3/12/2021 |
| Ms. Priya Darshini B | Artificial Intelligence and Machine Learning for Healthcare | ATAL - College of Engineering, Pune | 13/12/2021 - 17/12/2021 |

Student Placement Activities

| S.No. | Name of the Company | Total placement Interested | Number of students attended | Number of students cleared | % Of students cleared |
|-------|---------------------|----------------------------|-----------------------------|----------------------------|-----------------------|
| 1 | Healthwatch | 34 | 11 | 10 | 90.91 |
| 2 | Capgemini | 34 | 2 | 1 | 50 |