

Academicians call to improve biomedical engineering education in India

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Recent study at IIT Madras observed that the BME educational system in India has not accelerated enough compared to other engineering programs in India

Academics from top educational institutions in the country have come out with a whitepaper on Biomedical Engineering (BME) education for the first time in India.

Titled 'Future of Biomedical Engineering programs in India,' the whitepaper aims to help improve the quality of BME programs in India by identifying and addressing many challenges and bringing together all the stakeholders.

The Top recommendations of the whitepaper include:

- Ø Engineers to teach in medical colleges, doctors and industrialists to teach BME in engineering colleges. Every Biomedical Engineering college to partner with Medical colleges for AICTE accreditation and for developing medical devices
- Ø Establish a 'National BME Development Committee' with representatives from the Medical Devices Industry. BME education in India is to be revamped with outcome based education
- Ø A 'Medical Device Corridor,' similar to the 'Defence Corridor,' to be designed for achieving self-reliance in medical devices
- Ø Biomedical Engineers to be mandated in hospitals for accreditation, and they be qualified under the newly-introduced GATE (BME). Hospitals to provide internships to BME students.
- Ø Develop BME of AYUSH using rigorous scientific methods, develop special programs and courses for Yoga Engineering and Technology, Siddha Engineering and Technology, and Ayurveda Science Engineering and Technology. Integrate exponential technologies such as AI/ML, Data Analytics, VR/AR/MR, Robotics, Drones, 3D printing with the prevention and wellness science and technology: AYUSH.

Writing the foreword for the whitepaper, Dr. Vinod K. Paul, Member, NITI Aayog, said, "I am glad to note that the challenges faced by the Biomedical Engineering community in India are well documented in this whitepaper along with the recommendations to solve these challenges. We will do our best to address those challenges in the future."