SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY

Institutional Distinctiveness
2018-19

SSET aspires to become a globally recognized institution known for high-quality technical education, trailblazing research, and innovative solutions that address global needs. The Institute developed a comprehensive education policy to foster research and innovation in graduates by aiding their overall growth to the country's socioeconomic development. FAB Lab and the Robotics centre have always emphasized the goal of utilizing multidisciplinary engineering principles to develop products and technologies with a global impact, as well as instilling start-up culture and entrepreneurship activities in students. The Fab Lab predominately develops socially relevant projects at a low cost by utilizing cutting-edge technologies such as 3D printing, laser cutting, electronic workbench, and so on. The projects that were implemented had a significant impact on society thereby improving the theoretical and practical knowledge of students. Fab Lab implements a range of techniques to produce the desired results, including training sessions on the latest technology, applications, and machinery. Organizing project discussions and ideas to identify societal issues, as well as analyzing innovative ideas by forming project groups comprised of students and faculty. We have sessions with an expert committee to review and provide feedback on the ideas and solutions developed by students, as well as to help them navigate technical project competitions and funding proposals. Fab Lab's projects have received numerous national and international awards including the Gandhian Young Technological Innovation Award with a funding of 15 lakhs was given to a project on Artificial Deep Learning Brain Actuated Lower Limb Exoskeleton for Paralyzed in 2020. In 2018, Brain Wave Nerve Excitation for Physically Disabled was nominated for the Gandhian Young Technological Innovation Award at the national level. The project on De-Addiction Coil for Drug Addicts was awarded the First Prize in AICTE-ECI Chhatra Vishwakarma Awards, IIT Delhi in 2017. The Life Detection and Rescue System Using Snake Robot took third place in the National Level 2017 Third Dialogue India Academia Conclave (IIT, Delhi). Bionic Haptic Arm won 2nd place in the KSCSTE Tech Fest 2016, which was held at the state level. We promote the use of creativity in the teaching and learning process and encourage students to learn the most up-to-date information for the benefit of society. Many projects were funded, such as Bionic Haptic Arm and Eco friendly and energy efficient traffic junctions, which received external funding of KSCSTE-15000 INR each in the academic year 2015-16. During the academic year 2016-2017, we received an external fudding from KSCSTE of 15000 INR each for the projects: Wearable device for detection and prevention of heart failure and Muscles To Machine Interface for Paralyzed. Bug-bot with Mosquito attractor, A De-addictive coil for drug addicts and Brain to muscle interface for paralyzed person were the projects done during the year 2017-2018, which received both external and internal funding. 2018-19 brought out a handful of projects like Medicos (Patent Filing), De-addiction coil for drug addicts (Patent Filing), Brain Control Lower Limb Exoskeleton, Self-Assistive Brain Body Control Physiotherapy device (Patent Filing) and Lower Limb Exoskeleton, which received internal and external funding. As a result of the unwavering commitment in providing high-quality technical education and ensuring that all of its activities meet global socioeconomic needs, SSET is inclined to create world-class engineers.