Indo US Collaboration for Engineering Education (IUCEE)

(Section 8 Company in the name of IUCEE FOUNDATION)

The vision of IUCEE is to improve the quality and global relevance of engineering education in colleges in India. The major focus is on faculty development, student development, curriculum development, as well as improved teaching technologies & engineering education research. A primary objective is to improve the ecosystem which will foster the employability, entrepreneurship and leadership skills of engineering graduates.

Faculty from over 100 Indian colleges and 200 global faculty members are connected in a wide variety of teaching and research collaborations.

The **IUCEE College Consortium** was formed in 2010 and has 60 members in 2021. Donations from these colleges enables IUCEE to conduct its programs.

The **IUCEE Virtual Academy**, started in 2011, uses technology to enable engineering education experts to conduct live Webinars and MiniCourses on-line to faculty and students all over India. More than 1000 webinars on teaching, research and general education topics have been conducted. Recordings of all the webinars are available to Consortium members. Several mini-courses have also been conducted on-line on various topics including Outcomes Based Education and Engineering Education Research.

The IUCEE Global Network facilitates the participation of faculty, students and leaders of Consortium institutions to international events in engineering education. These include annual Global Engineering Deans Conferences and annual World Engineering Education Forums. An India Branch of ASEE (American Society for Engineering Education) meets at the annual ASEE Conferences. Students from Consortium institutions participate in annual Global Student Forums.

IUCEE Student Chapters facilitate regional and national conferences for promoting leadership and project based activities among students at Consortium institutions.

IUCEE co-organizes the International Conference on Transformations in Engineering Education (ICTIEE) annually in India. ICTIEE 2014 was held at Hubli, ICTIEE 2015 was held at Bangalore, ICTIEE 2016 was held in Pune, ICTIEE 2017 was held in Hyderabad, Rajkot and Jaipur, ICTIEE 2018 was held in Gr. Noida and Madurai and ICTIEE 2019 was held in Hyderabad and Chandigarh. ICTIEE 2020 was held in Hyderabad and ICTIEE 2021 was Virtual. Typical more than 1000 participants attend and 200 papers are presented, with 40 participants from around the world.

Since 2014, IUCEE has been publishing the **Journal for Engineering Education Transformations (JEET)**, in collaboration with one of the Consortium Colleges (Rajarambapu Institute of Technology). This journal is a vehicle for sharing best practices in engineering education by Indian and global engineering educators. JEET also publishes of papers presented at ICTIEE Conferences.

Since 2015, IUCEE has offered **IIEECP (IUCEE International Engineering Educator Certification Program)** program with more than 1000 faculty certified so far from all over India.

The **IUCEE-EPICS Partnership** (Engineering Projects in Community Service) has been in partnership with Purdue University in 2016. Faculty and students from IUCEE institutions are engaged with several community partners with the goal of providing engineering education with emphasis of design thinking and development of professional and leadership skills while assisting communities on real projects. More than 200 faculty and over 800 students have worked on about 200 community projects during 2017-2020.

The **Global Advisory Forum,** formed by a group of industry and academic leaders in 2016, guides engineering colleges in their efforts to improve the employability of engineering graduates.

In summary, IUCEE has become established as a prime mover for improving quality of engineering education in more than 100 engineering colleges in India. An ecosystem has been built with the help of experts from United States. This ecosystem includes face-to-face workshops, webinars and courses in a blended format for faculty development, international conferences, a peer-reviewed journal for engineering education, a certification program as well as networking opportunities between engineering educators and students from India and the IFEES global community. This ecosystem has been found to improve with accreditation and rankings of participating institutions, as well as enabled them to move towards implementation o the guidelines of the National Education Policy 2020.