IIEECP: A Signature Program of IUCEE

IIEECP (IUCEE International Engineering Educators Program)
Started in 2015
1891 faculty completed Phase 1
863 fully certified through Phase 3
57 institutions participated from all over India
Certified by IGIP Austria

NEP Higher Education Guideline 3: Motivated, Energized, and Capable Faculty
1. The most important factor in the success of higher education institutions is the quality and engagement of its faculty.
2. **Empowering the faculty to conduct innovative teaching**, research, and service as they see best will be a key motivator and enabler for them to do truly outstanding, creative work.

AICTE has already launched an excellent programs in 2020 for Inductee Teachers: National Initiative for Training of Technical Teachers: https://www.aicte-india.org/schemes/staff-development-schemes

IIEECP objective is address the needs of the faculty who have not been able to benefit from the AICTE program, at a cost reasonably similar to the AICTE program.

IIEECP Program Structure (2022)

The program is completed in 6 months. The Complete Program is offered online using a blend of synchronous and asynchronous tools.

Please note that IIEECP was offered in Phases during the years 2015-2020. The following new program structure is being offered for the first time with Orientation starting December 17, 2021.

IIEECP is designed to enable the participants to understand the principles of learner-centred teaching; to design or redesign a course and its elements, emphasizing learning outcomes; to develop different teaching and active learning strategies for implementation of these elements; to design formative and summative assessment tools and rubrics for outcomes assessment.

The program is delivered in Five Modules, of three weeks each, with one 'live ' session per week. *Canvas Instructure* (LMS) is used for posting readings, graded discussions and assignments. Participants are expected to be teaching a course and implement strategies learned in the different modules, during the course. An Orientation Module 0 prepares participants to participate effectively in all aspects of the Course.

Module 0: Orientation
Module 1: The Teaching-Learning process
Module 2: Course Design & delivery
Module 3: Creating a Dynamic Classroom
Module 4: Harnessing the Power of Technology
Module 5: Effective Assessment

At the end of the five modules (15 weeks), participants develop Teaching Portfolio and a one year plan of action for teaching/research and their professional development . Successful oral presentations of these will complete the certification process.

IIEECP Program Fees:

Rs. 9,000 for IUCEE Consortium members (Rs. 18,000 for non-members)
(For new Consortium members, 3 participants will be allowed to enrol for Free).
The fees enable IUCEE FOUNDATION (a Section 8 non-profit company in India) to pay modest honoraria to the faculty, assistant faculty and supporting staff.

IIEECP Faculty

The IIEECP program is designed and coordinated by Dr. Veena Kumar, Executive Director of IIEECP and active member of the Board of IUCEE. Dr. Veena Kumar currently teaches at the University of Maryland Global Campus, USA, and was earlier Professor and chair, Education Technology, Indian Institute of Technology, Delhi, India. IIEECP is a culmination of Dr. Kumar's 30 years of teaching, research and experience in curriculum development, e-learning, and teacher training in France, India and USA.

The greatest strength of IIEECP is its highly qualified and dedicated international faculty. Each module is taught by a well-known expert in the area, and each faculty is supported by Assistant Faculty. Significant value-additions have been made by all faculty members who teach different modules; Dr. Archana Mantri (Chitkara University), Dr. Neeraj Buch (Michigan State University), Dr. Anil Kulkarni (Penn State University) Mr. Thomas Iwinsky, (Penn State University), Dr. Rajan Subramaniam (Arizona State University), Dr. Stephanie Farrell (Rowan University), Dr. Claire Komives (San Jose State University), Dr. Sohum Sohoni (Arizona State University), and Dr. Rio D'Souza (St. Joseph Engineering College).

The IIEECP Assistant faculty are faculty members from Indian engineering colleges who have completed the certification program with distinction and have undergone special training. They play a very important role in sustaining the high standard of the program by closely monitoring the participants and grading assignments Over the past five years, IIEECP had developed a very large panel of Assistant Faculty members who are taking the lead in several initiatives in their own institutions.

IIEECP is Different from Other Faculty Development Programs

IIEECP is very different from conventional faculty development programs:
- The faculty training is offered for a sustained period of time and includes a well-designed practicum component. Participants experience the strategies taught by actually planning, implementing & evaluating them in their own classes.
- The training is focused on developing *personal and professional confidence* by developing a responsible, reflective mindset –a mindset that is focused on '*what I do'* rather than on '*why it cannot be done.*
- A significant part of the content shared in the program is developed based on the learning from diverse scholarly sources specially, from research articles by **Richard Felder** and **Rebecca Brent.** The insights, arguments and recommendations are based on over 30 years of study & personal research in education technology as well as direct interaction with Indian and international engineering and university faculty, by the Executive Director, **Dr. Veena Kumar.**

- The program is fully customized for Indian engineering education system

IIEECP Program Outcomes

At the end of the certification program, the participants will be able to:
- Explain how learning happens based on the major theories of learning including brain-based learning.
- Identify the learning & employability needs of the Millennial learners and to implement strategies to sustain their motivation
- Develop a personal Teaching Philosophy Statement that includes participant's short and long term goals
- Write/review course outcomes using Bloom's taxonomy and map them to program outcomes.
- Explain Lowman's 2D model for Effective Teaching and design activities for promoting *Intellectual Excitement* & *Interpersonal Rapport*.
- Plan and implement the Flipped class
- Create a dynamic classroom by using a variety of active learning strategies
- Write high quality tests and quizzes substantially based on a deeper awareness of effective assessment principles and practices
- Develop transparency in assessment by creating rubrics and providing constructive verbal and written feedback.
- Plan and implement collaborative learning activities in order to develop real world professional skills needed for employability
- Design and record lectures in the audio & video formats
- Use/create virtual labs in theory & lab. classes
- Create a dedicated course website using free resources

IIEECP is recognized by IGIP Austria

IIEECP was recognized n 2016, by IGIP (International Society for Engineering Pedagogy) Austria, a highly prestigious and respected organization in Europe. IGIP (http://www.igip.org) has more than 40 years tradition in contributing to engineering pedagogy. IGIP's members and activists have contributed to making IGIP a leading global engineering association. More than 1,500 professionals all over the globe carry the title of "IGIP International Engineering Educator -Ing.Paed.IGIP". More than 100 IIEECP certified faculty carry the Ing.Paed.IGIP" title.