# **Faculty Development Programme**

# Design and Development of Industry led Curriculum in Technological Era

### About the Programme:

Academic and Administrative Development Centre (AADC) of Academy of Maritime Education and Training Deemed to be University and Association of Indian Universities jointly organized a 9 days Faculty Development Programme on "Design and Development of Industry led Curriculum in Technological Era". The FDP was scheduled from December 14-22, 2022 from 7 PM to 9 PM through online Zoom Meet platform. Total 1500 applications were received from the participants all across the nation but only 1000 participants were selected in order to ensure the active participation and engagement from all of them. Out of 1000 participants, only 685 participants successfully completed the Faculty Development programme and got certificate.

### **Objective of the Programme:**

The ultimate objective of conducting this FDP programme is to

- Identifying the different components of online teaching and learning
- Designing e-content, open educational resources and adopting innovative instructional delivery models
- Mapping and matching pedagogies and technologies
- Exploring new knowledge domains
- Provide an awareness of some major concepts to consider in the designing a course

# Background

There were total 8 sessions in the nine days' online Faculty Development Programme. Eight experts across the nation deliberated on different topics of 'Curriculum Design and Development' through online mode. They were delivered there talk on industry ready curriculum for student development, Outcome based curriculum and industry needs, Design and implementation of industry need curriculum, impact of industry 4.0 and their innovation approach and Advancement in technology and need for curriculum alignment. They were always shown keen interest in associating themselves for the activities of the various Programmes by sharing their experience. Details of different modules of the FDP are as given below:

**Prof. Dr. Atul M Gonsai,** Professor, Department of Computer Science, Saurashtra University, Gujarat. He has discussed on Industry Ready Quality Curriculum for 360-degree Student Development would have certainly equipped the faculty in culling out the skills to make the students industry ready. He insisted the significance of collaborating with the nearby industry in terms of research, training and product development, which will enhance the skills of the students.

**Dr. Joshua Earnest,** Professor, National Institute of Technical Teachers Training and Research, Bhopal. He has discussed on how to plan to establish Industry-connect with outcome based curriculum for the UG and PG Programmes and the other associated courses. He emphasized the importance of Manufacturing, Marketing and Service type of industries and Research and Development type of industries for enhancing the performance of Outcome based curriculum.

**Dr.S.Karpagavalli,** Associate Professor and Head, Department of Computer Science, PSGR Krishnammal College for Women, Coimbatore. She has discussed on Design and Implementation of Industry Supported UG Program insisted the academicians to concentrate on what sort of industries support are expected and the analysis of the suggestions given by the industries in framing the courses, also how and what to be adopted to incorporate the suggestions.

**Dr. M Jayakumar,** Consultant TATA Electronics, Former Dean of Education, Bharathiar University Coimbatore. He has discussed on Curriculum Construction Process for Industry Led Curriculum emphasized what set of technological tools and technological platform to be incorporated for being more productive while designing the curriculum. He insisted on raising the focused question thereby students can actively involve themselves to find answers on their own from the web resources.

**Dr. T. Devi,** Professor and Head, Dept. of Computer Application, Bharathiar University Coimbatore. She shared her wisdom on Impact of Curriculum 4.0 by addressing the necessity for Industry 4.0 and the curriculum 4.0. She mentioned the significance of emerging technologies such as AI, Robotics in industry 4.0 and the necessary incorporation to be made in curriculum to compete. She showcased the Bharathiyar university's curriculum in emerging technologies which would fulfill the cutting edge technologies demand.

**Prof. Vellingiri. P,** Senior consultant-Tata Electronics. Chairman-BOG, Government College of Engineering, Salem. Former General Manager-Titan Watch Division, Chairman-QCFI, Hosur Chapter. He shared his views on Problem solving methods and tools which would address 95% of the quality related problems in factory could be solved with seven fundamental quantitative tools. He pointed out the employment and business opportunities in India and what are the challenges we would encounter and how that could be addressed.

**Prof. Srinivasa Raju,** CEO, Pi Square Technologies. He has discussed on Advancement in Technology and need for Curriculum Alignment emphasized the incorporation of disruptive technologies, 360 degree development and entrepreneur mindset in higher education. He shared insights on the key sectors for job opportunities and where the focus to be directed while designing the curriculum.

**Dr. Dinesh Babu S.O,** Director, K.U.M India Private Limited and Samhitha Marine Private Limited, Chennai, Tamilnadu, India. He has discussed about the maritime technologies in shipping industries, evolution of manned submersibles, challenges in underwater communication, navigation system, sonars etc. He has emphasized the importance of scientific Deep Ocean mission by Ministry of earth sciences, Govt of India.

#### Day 1: 14.12.2022 (7 pm to 9 pm)

The inaugural session of the FDP was held on 14<sup>th</sup> December 2022. The welcome address was delivered by Dr. Deepa Rajesh, Director-HRDC & AADC Nodal officer. Presidential address was delivered by Our Honorable Vice- Chancellor Col. Dr. G. Thiruvasagam. The chief guest address was delivered by Dr. N. Panchanatham, Former Vice – Chancellor, Tamil Nadu Teachers Education University. He has appreciated the AIU for developing the Academic and Administrative Development Centre to perfectly balance the academics and administration in an institution. He inspired the participants by elaborating the top pedagogical methods out of the 150 and thereby to equip the faculty in order to create the best employment opportunities for the students. It's our pleasure to have such an eminent expert on this forum.

Address by the guest of honor was delivered by Dr. Amarendra Pani, Joint Director & Head, Research Division, Association of Indian Universities, New Delhi. Professor discussed about the massive paradigm changes in higher education for the past decade. He insisted the significance of the reforms, formulative changes to be incorporated by the Policy makers and academic community and the Overview of the FDP was delivered by Dr. T. Sasilatha, Dean Academics and International Relations, AMET.

#### Inauguration of Faculty Development Programme on "Design and Development of Industry led Curriculum in Technological Era"

In continuation of the inaugural, the technical session one started. Our guest speaker Dr. Athul M Gonsai, Professor, Department of Computer Science, Saurashtra University, Gujarat discussed on Industry Ready Quality Curriculum for 360-degree Student Development would have certainly equipped the faculty in culling out the skills to make the students industry ready. He insisted the significance of collaborating with the nearby industry in terms of research, training and product development, which will enhance the skills of the students. More than 500 participants are attended the session and got benefited.

#### Day 2: 15.12.2022 (7 pm to 9 pm)

Our guest speaker, Dr. Joshua Earnest, Professor, National Institute of Technical Teachers Training and Research, Bhopal discussed on how to plan to establish Industry-connect with outcome based curriculum for the UG and PG Programmes and the other associated courses. He emphasized the importance of Manufacturing, Marketing and Service type of industries and Research and Development type of industries for enhancing the performance of Outcome based curriculum. More than 400 participants are attended the session and got benefited.

#### Day 3: 16.12.2022 (7 pm to 9 pm)

Guest speaker Dr.S.Karpagavalli, Associate Professor and Head, Department of Computer Science, PSGR Krishnammal College for Women, Coimbatore discussion on Design and Implementation of Industry Supported UG Program insisted the academicians to concentrate on what sort of industries support are expected and the analysis of the suggestions given by the industries in framing the courses, also how and what to be adopted to incorporate the suggestions.. More than 450 participants are attended the session and got benefited.

### Day 4: 17.12.2022 (7 pm to 9 pm)

Our guest speaker Dr. M Jayakumar Consultant TATA Electronics, Former Dean of Education, Bharathiar University Coimbatore discussion on Curriculum Construction Process for Industry Led Curriculum emphasized what set of technological tools and technological platform to be incorporated for being more productive while designing the curriculum. He insisted on raising the focused question thereby students can actively involve themselves to find answers on their own from the web resources. More than 440 participants are attended the session and got benefited.

#### Day 5: 19.12.2022 (7 pm to 9 pm)

Our guest speaker Dr. T. Devi Professor and Head, Dept. of Computer Application, Bharathiar University Coimbatore shared her wisdom on Impact of Curriculum 4.0 by addressing the necessity for Industry 4.0 and the curriculum 4.0. She mentioned the significance of emerging technologies such as AI, Robotics in industry 4.0 and the necessary incorporation to be made in curriculum to compete. She showcased the Bharathiyar University's curriculum in emerging technologies which would fulfill the cutting edge technologies demand. More than 430 participants are attended the session and got benefited.

### Day 6: 20.12.2022 (7 pm to 9 pm)

Our guest speaker Prof. Vellingiri. P, Senior consultant-Tata Electronics. Chairman-BOG, Government College of Engineering, Salem. Former General Manager-Titan Watch Division, Chairman-QCFI, Hosur Chapter He shared his views on Problem solving methods and tools which would address 95% of the quality related problems in factory could be solved with seven fundamental quantitative tools. He pointed out the employment and business opportunities in India and what are the challenges we would encounter and how that could be addressed. More than 420 participants are attended the session and got benefited.

# Day 7: 21.12.2022 (7 pm to 9 pm)

Our guest speaker Prof. Srinivasa Raju CEO, Pi Square Technologies discussion on Advancement in Technology and need for Curriculum Alignment emphasized the incorporation of disruptive technologies, 360 degree development and entrepreneur mindset in higher education. He shared insights on the key sectors for job opportunities and where the focus to be directed while designing the curriculum. More than 420 participants are attended the session and got benefited

# Day 8: 22.12.2022 (7 pm to 9 pm)

Our guest speaker Dr. Dinesh Babu S.O Director, K.U.M India Private Limited and Samhitha Marine Private Limited, Chennai, Tamilnadu, India. He has discussed about the maritime technologies in shipping industries, evolution of manned submersibles, challenges in underwater communication, navigation system, sonars etc. He has emphasized the importance of scientific Deep Ocean mission by Ministry of earth sciences, Govt of India. More than 420 participants are attended the session and got benefited

Valedictory session was held at the last day of the programme. Welcome address was delivered by Dr. Deepa Rajesh, Director-HRDC & AADC Nodal officer. The valedictory address was delivered by Dr. M. Jayaprakashvel, Registrar I/c. The program was ended with Vote of Thanks by Dr. T. Sasilatha, Dean Academics and International Relations, AMET.

### Valedictory session

# **Outcome of the Programme**

- Participants will develop a clearer understanding of what curriculum entails
- Participants will be able to identify the different components that go into designing a course that goes beyond a focus on content
- Participants will come to know a number of strategies for actively engaging students in their learning.

# Feedback from the participants

Many Participants are expressed their views and feedback on this program. They are expecting more programs like this in future.