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Sponsored

FACULTY DEVELOPMENT PROGRAM (FDP)



FUTURE INSTITUTE OF ENGINEERING AND MANAGEMENT

**6-Day National Level Online FDP on :
"Med-Tech challenges and opportunities under the 'Make in India' framework"**

organised by



Future Institute
of Engineering
and Management

Approved by AICTE | Affiliated to MAKAUT

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Start Date : November 10, 2025

End Date : November 15, 2025

Level : Basic

Program Days : 6

Area : Engineering and Management

Sub Thrust Area : **Health Care & Med-Tech - Artificial
Intelligence & Applications**

Introduction:

The Faculty Development Program on “Med-Tech Challenges and Opportunities under the ‘Make in India’ Framework” aims to provide an in-depth understanding of the rapidly evolving medical technology sector in India. As the country aspires to strengthen its healthcare ecosystem and reduce import dependency, Med-Tech has emerged as a critical focus area under the Make in India initiative. While the industry faces challenges such as regulatory complexities, reliance on imports, and shortage of specialized talent, it also offers vast opportunities in innovation, R&D, manufacturing, and digital health integration. With the Indian Med-Tech market projected to reach \$50 billion by 2030, faculty members have a unique role in shaping research, talent development, and industry collaboration that can drive this transformation. This program will engage participants in exploring policy frameworks, technological advances, and practical approaches to prepare the next generation of professionals for leadership in India’s Med-Tech journey.

Programme Objectives :

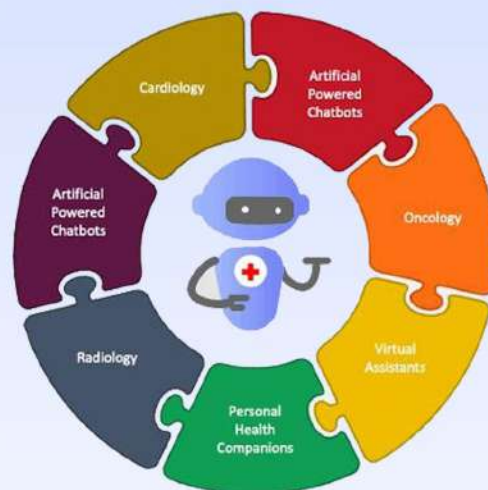
The Faculty Development Programme (FDP) intends to facilitate up-gradation of knowledge and skill to the faculty members from different institutes of India and intends to provide opportunities for induction training to teachers employed in disciplines like Science, Engineering and Technology allied to Health Care.

The Faculty Development Programme (FDP) also intends to cover areas such as National Education Policy (NEP) 2020 for its implementation, Indian values and ethos. Life skills such as time and stress management, Research Methodology for the development of new concepts, methods and techniques, theory in the related areas and skills development and up gradation of pedagogical approaches for educational technology, motivation, communication skills, management and other relevant issues to keep pace with the changing scenario in Technical Education.

The scheme is designed to enhance the teaching and other skills of the faculty and to make them aware about modern teaching tools and methodologies. It provides an opportunity to acquire knowledge about current technological developments in relevant fields. It will not only promote the professional practices relevant to technical education but also motivates the faculty to achieve competitive teaching and learning environment, thus channelizing development with respect to academic qualifications and experience.

The aim of this FDP is to motivate the academic and intellectual environment in the institution by providing opportunities for conducting research in the health sector using Engineering tools.

This FDP will also describe the best way how to transform to the next level of medical technology. The purpose of this FDP is to confirm or refute whether companies are ready for revolution in the health care industry.



Programme Outcome:

The proposed faculty development programme aims to enhance the skills and capabilities of faculty members and researchers in academic processes at the University level.

It seeks to institutionalize good academic practices through stakeholders' involvement for continuous improvement. The program includes discussions, case studies and hands-on activities to improve the educational outcome. Experts from academia as well as industry will share their knowledge with the participants

Programme Schedule:

Day 1 (10/11/2025)	6:00PM to 6:30PM		6:30PM to 8:00PM		8:00PM to 9:30PM
Topic	Inaugural Session		Advancement in Brain Image Analysis in Machine Learning's Framework		Diabetes and Technology
Name of the Expert	-		Prof. (Dr.) Amlan Chakrabarti		DR. Debasis Giri
Designation & Organization	-		Professor, Director A.K. Choudhuri School of Information Technology, University of Calcutta		Consultant Endocrinologist, Medical Director, Sugarline Healthcare Pvt. Ltd.
Day 2 (11/11/2025)	6:00PM to 7:30PM		7:30PM to 9:00PM		
Topic	AI and Diabetes Management		AI-Enabled Techniques for Alzheimer's Disease		
Name of the Expert	DR. Shambo Samrat Samajdar		Prof. (Dr.) Joyita Dutta		
Designation & Organization	Consultant Physician, Diabetes and Allergy-Asthma Therapeutics Specialty Clinic, Kolkata		Professor, Department of Biomedical Engineering, University of Massachusetts Amherst		
Day 3 (12/11/2025)	6:00PM to 7:30PM		7:30PM to 9:00PM		
Topic	Brain Computer Interface for Neuro-motor Rehabilitation		Artificial Intelligence in Medicine and Cardiology		
Name of the Expert	Prof. (Dr.) Amit Konar		Dr. Debopriyo Mondal		
Designation & Organization	Professor, Electronics and Tele-communication Engineering department, Jadavpur University		Consultant interventional cardiologist, Manipal Hospital, Kolkata		
Day 4 (13/11/2025)	6:00PM to 7:30PM		7:30PM to 9:00PM		
Topic	Generative AI for Building Interactive Medical System		Ethical Concerns with Increasing Application of AI in Medical Technology		
Name of the Expert	Dr. Soumya Sen		Dr. Chaitali Basu Mukherji		
Designation & Organization	Assistant Professor, University of Calcutta		Ethical Process Designer, Ex m-Junctions Services Limited		
Day 5 (14/11/2025)	6:00PM to 7:30PM		7:30PM to 9:00PM		
Topic	Deep Learning in Ophthalmology-A Clinical Perspective		From Mechanics to Mechano-therapeutics: Role of Inter Disciplinarity in Bio-Medical Research		
Name of the Expert	DR. Mervyn Thomas		Dr. Satanik Mukherjee		
Designation & Organization	Clinical Associate Professor, Ophthalmology, University of Leicester		Post-Doc Fellow, Washington University St. Louis, USA		
Day 6 (15/11/2025)	2:00PM to 3:30PM	3:30PM to 5:00PM	5:00PM to 6:30PM	6:30PM to 7:30PM	7:30PM to 8:00PM
Topic	Gen AI for Personalized Medicine: Creating Adaptive Treatment Plans using Patient Data	AI Based Interventions for Cancer	From Emotions to Action: Affective Computing Applications in Next-Generation Indian Med-Tech	Online test & feedback	Valedictory Session
Name of the Expert:	Mr. Rajmohan De Sarkar	Dr. Saptarsi Goswami	Prof. (Dr.) Pradipta Kr. Banerjee		
Designation & Organization	Director-Technology Services, Ardent Computech Pvt. Ltd.	Assistant Professor & Head, Computer Science, Bangabasi Morning College, University of Calcutta	Professor & HOD, AI & ML, Future Institute of Technology		

Who should attend :

This course will be of value to the faculty members of AICTE approved institutions, research scholars, PG Scholars, participants from Government, MoE/AICTE/UGC, bureaucrats/ technicians/participants from industry etc., and students of host institutions, who are interested in pursuing research in developing Machine Learning, Data Science, Artificial Intelligence & Applications, Bio-Medical Research, and Professional Ethics in Health Care and Medical Technology sector.

Participation Fee: No Registration fee for Participation and Certification.

Registration :



Please scan for registration



How to Register



Advisory Committee :

Dr. Alope Kr. Ghosh

Executive Director, Future Education

Dr. Anirban Chakrabarty

Principal, Future Institute of Engineering and Management

Dr. Sajal Kumar Giri

Registrar, Future Institute of Engineering and Management

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