



PUBLIC
HEALTH
FOUNDATION
OF INDIA



ASSOCIATION OF
HEALTHCARE
PROVIDERS
INDIA



Indian Institute of Science



Indian Institute of Space Science and Technology

Certificate Course in Healthcare Technology (CCHT)



First of its kind amalgamation of premier institutes



Online sessions

Online sessions with easy to use Learning Management System (LMS) interface



Convenient Schedule

Flexibility and self-paced learning to be completed in 2 months



Expert Faculty

Learning from renowned faculty from eminent institutions



Award of Certificate

e-Certification by prominent partner institutes (PHFI, AHPI, IISc and IIST)



Unique design

Robust Program Curriculum with case studies and activities



Networking

Connect with Digital Health Industry leaders

Eligibility Criteria

All Healthcare Professionals with 2 years' Experience in Healthcare

Course Fees

INR 10,000 *Inclusive of GST

Start learning from April 2021



Click here to enroll

CERTIFICATE COURSE IN
HEALTHCARE TECHNOLOGY



For more Information please contact

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Disclaimer : The content has been developed by Public Health Foundation of India (PHFI), Association of Healthcare Providers of India (AHPI), Indian Institute of Science (IISc) and Indian Institute of Space Science and Technology (IIST) for the purpose of training the healthcare professionals in the field of health care technology and is intended for general education and information purpose only.

INTRODUCTION

Medical Technology is indispensable to healthcare delivery. It is an integral part of the entire healthcare lifecycle, from the stage of screening/diagnosing to treatment/care; from restoring patients to normal lives and monitoring their health post treatment. For decades now, with advancement of technology and increasing sophistication of medical devices, the industry has played a major role in bringing down the incidence of disease and improving the overall healthcare system across the world. Globally, the healthcare sector is witnessing rapid advancements in how patients are diagnosed and treated and the Medical Technology industry is at the core of this transformation. The industry is well positioned to revolutionize healthcare in India as well. Using a mix of nascent as well as advanced technologies such as artificial intelligence, remote sensing, 3D printing, e-ICUs, virtual reality, telemedicine and others has the potential to help India's healthcare industry overcome many of the challenges faced by it- be it accessibility, affordability or quality¹

Health care technology is capable of providing cost -effective solutions at a time when the demands on health and social care services continue to increase.² At the moment, the pace of change in the technology is increasing at an exponential rate. Rapid technological change will require retraining and rethinking the roles of clinicians. Both existing and future generations of clinicians will need training in digital literacy to be able to make use of the technology in providing optimum care.³ The future of healthcare lies in working hand-in-hand with technology and healthcare workers have to embrace emerging healthcare technologies in order to stay relevant in the coming years⁴

Taking all this into consideration, Public Health Foundation of India (PHFI), Association of Health Providers India (AHPI), Indian Institute of Science (IISc), Bangalore and Indian Institute of Space Science and Technology (IIST) have collaborated for a Certificate course on Healthcare Technology which will combine theoretical and practical aspects of healthcare technology at every level of healthcare delivery and personnel involved as per requirement.

References:

1. Deloitte: Medical Technology, Shaping Healthcare for All in India
2. Deloitte -how technology is transforming health
3. Doctors need retraining to keep up with technological change:
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6066402/>
4. 10 Ways Technology Is Changing Healthcare: Future of Medicine: <https://medicalfuturist.com/ten-ways-technology-changing-healthcare/>

PARTNERS

PUBLIC HEALTH FOUNDATION OF INDIA (PHFI)

PHFI, a public private initiative was launched by the 14th Hon'ble Prime Minister of India on March 28th 2006 at New Delhi, India. Evolved through consultations of multiple constituencies, Indian as well as International academia, state and central governments etc. PHFI is a response to redress the limited institutional capacity in India for strengthening training, research and policy development in the area of Public Health.

PHFI has adopted a broad integrative approach to public health, following up with the training of numerous Healthcare Professionals under various capacity building initiatives for healthcare professionals since 2010. Training Division at PHFI is implementing 25 capacity building initiatives for Primary Care Physicians (PCPs) and Other Healthcare Personnel across the country in the journey spanning 10 years. So far we have trained over 32,000 Health care professionals spread over 34 States and UTs in the country of which 10,000 are affiliated to the Government sector. 12 State Governments have adopted these initiatives which have spread to 10 other countries across South-East Asia and Africa including Ministry of Health, Government of Rwanda.

For more information visit: www.phfi.org

ASSOCIATION OF HEALTHCARE PROVIDERS OF INDIA (AHPI)

Association of Healthcare Providers (India) represents the majority of healthcare providers in India. It is registered as "not for profit" society. AHPI advocates with the government, regulatory bodies and other stake holders on issues, which have bearing on enabling its member organizations to deliver appropriate healthcare services to community at large. Mission of AHPI is to build capacity in Indian health systems with focus on providing safe and affordable health services to all sections of society.

For more information visit: www.ahpi.in





INDIAN INSTITUTE OF SCIENCE (IISc)

Indian Institute of Science (IISc) was established in 1909 by a visionary partnership between the industry and the Government of India. Over the last 111 years, IISc has become India's premier institute for advanced scientific and technological research and education. Its mandate is "to provide for advanced instruction and to conduct original investigations in all branches of knowledge as are likely to promote the material and industrial welfare of India." In 2018, IISc was selected as an Institution of Eminence (IoE) by the Government of India.

For more information visit: www.iisc.ac.in

INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY (IIST)

Indian Institute of Space Science and Technology (IIST), situated at Thiruvananthapuram, Kerala, is a Deemed to be University under Section 3 of the UGC Act, 1956. Established in 2007, IIST functions as an autonomous institution under the Department of Space (DoS), Government of India. It was conceived with a vision to nurture exceptional manpower for the Indian Space Research Organization (ISRO), one of world's leading scientific organizations engaged in space research and space applications. The institute is the first of its kind in the country to offer high quality education and research at the undergraduate, graduate, doctoral and post-doctoral levels in all areas of space science, space technology and space applications as well as in the relevant areas of basic sciences.

For more information visit: www.iist.ac.in

ABOUT THE COURSE

Certificate Course in Healthcare Technology (CCHT) is a unique 5 modular course offered on an online learning management systems (LMS) designed to help healthcare professionals learn about the amalgamation of healthcare and technology.

Each module has 4 sub modules consisting of **video sessions by renowned faculty, course readings, descriptive assignments with pre and post session questions.** The online course is a judicious mix of videos, case studies, problem solving techniques with great flexibility to accommodate participant's busy schedule.

OBJECTIVES OF COURSE

Primary Objective

To develop and implement a capacity building initiative in healthcare technology for healthcare professionals

Secondary Objectives

- To impart basic knowledge of healthcare technology and its practical application
- To provide awareness of technology application in patient and functional management
- To prepare for technology led advancements and innovations in healthcare along with regulatory and practical aspects

ENROLMENT PROCESS

- 1 Apply for Course
- 2 Submit Documents
- 3 Await Confirmation
- 4 Join Programme
- 5 Complete the Program in 2 months and get certified

Selection for the course is strictly based on education and work experience. After successful resgistration, login credentials will be provided to join the course on LMS platform



COURSE SCHEDULE AND DURATION

Convenient Schedule: online sessions and assessments **to be completed in 2 months after enrolment.**

LEARNING OUTCOMES



Skill to perform health technology assessment at their own work place



Articulate the technology needs and management tools for the organization



Learn about technology led health care and latest innovations for patient and functional management



Convert the healthcare technology assessment to procurement and implementation needs



Evaluate information systems and applications



Implement solutions that assure confidentiality, security and integrity

COURSE CONTENT

Introduction to Healthcare Technology and its practical application

- National Digital Health Mission
- Introduction, Importance and Basic terminology in Health technology and Role of technology/ IT managers in healthcare
- Understanding health care data and standards
- Understanding health care data and digital epidemiology

1

Technology-led Health Care Part-1

- Clinical decision support systems. (CDSS)
- Artificial intelligence and algorithms in Healthcare
- Patient monitoring systems (PMS)
- Role of IoT and Point of Care devices in Healthcare

2

Technology-led Health Care Part-2

- Quality Management using Technology
- Technology for infection prevention and waste management:
- Development of medical devices and ensuring quality of medical devices
- Smart Hospitals Case study: Example of a smart technology enabled hospital

3

Technology-led advancements and innovations in healthcare

- Simulation, organ modelling
- Tissue Engineering Case Study- 3D printing in healthcare
- Augmented reality and virtual reality in healthcare
- Robotics and biomechanics in healthcare
- Futuristic health technologies of the next decade

4

Healthcare technology - Regulatory, policy and Practical aspects

- Legal, ethical and Intellectual property rights in Healthcare technology and Cybersecurity in hospitals
- Health technology policies and guidelines
- Health technology assessment
- Procurement of technology in healthcare. Economics vs outcomes!

5



CRITERIA OF CERTIFICATION

The criteria for successful completion of the program is as follows:

- Completion of all five online modules (Baseline-endline assessment, session videos, course readings, pre-test and post-test of each module) within 2 months.
- Completion of descriptive assignments based on completed modules to be submitted during the course
- Clearance of the online exit examination, after Module 5 (Min. 50% score is required to clear the examination)

AWARD OF CERTIFICATE

The candidate completing the online training program successfully will be awarded e-certificate of completion which will be jointly issued by all the prominent partner institutes . (PHFI, AHPI, IISc and IIST)

INSTRUCTORS



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Mr. Pranav Maranganty

Entrepreneur & Advisor - Whitespace, CoderBunker, Expande Partners, Turnkey, NanoHealth



Use of technology shifting from advance specialty care and high-tech medicine towards using technology to enable prevention and primary care -**HealthTech**



Healthcare IT market to account to a CAGR of 23.85% in the forecast period of 2020 to 2027 - **Data Bridge**



US\$250 billion in healthcare spending in the U.S. could shift to virtual care models in the wake of the pandemic -**McKinsey**



Interoperable data and platforms- insights from this data will inform real-time decisions about health -**Deloitte**

