

PhD in Heritage Science & Technology
(Full-time on-campus & by External registration)



Department of
Heritage Science and Technology



Indian Institute of Technology
Hyderabad

What is HST ?

Heritage Science and Technology (HST) globally deals with the techniques for analysis, conservation and development of heritage assets such as monuments and heritage structures. In the context of India, it also includes intangible heritage assets such as language, music, traditional medicine, rituals, dress, culture, costumes and practices. Thus, HST encompasses the use of science and technology for the study, development and utilization of the heritage assets for the economic prosperity, health, well being of the society and to enhance the soft power of the nation.



PhD in HST

The PhD program in Heritage Science and Technology is a research training program to apply methods from science and technology in Heritage domains. It allows researchers to probe the science behind Heritage and develop technology to serve Heritage professions and build assets. The program is designed to train candidates by a broad spectrum of course work in HST followed by research activity in diverse heritage domains.



Research areas in HST @ IITH



Instrumentation and analytics for Yoga and Indic performing arts

- Quantify and characterize the performance of Yoga, Bharatanatyam, Kalaripayattu and other performing arts using instrumentation and machine learning. Study the same from a perspective of physiology, neuroscience and movement science.



Acoustics of Indian musical instruments

- Study the acoustics and vibrations generated by Indian musical and percussion instruments in the glorious traditions of Sir C.V.Raman.

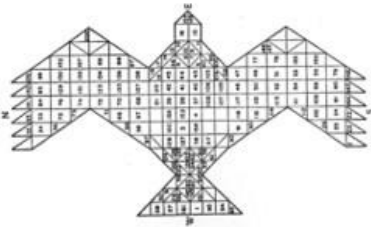


Research areas in HST @ IITH



Analysis and characterization of material cultures

- Apply the latest techniques in material science, metallurgy, genetics, hydrology and geology to history and archaeology in unraveling the origins of our civilization.



Computing and mathematics in Indic life, traditions and architecture

- A lab to study the mathematics inherent in Indic traditions and life. It also attempts to organize data about Indic life as structured datasets and apply computational methods to analyze and visualize the same.



Research areas in HST @ IITH

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Indic language, music and speech processing

- Study the theory of Indian languages, text and speech along with their processing and automatic recognition.



Characterization and synthesis of formulations in Indian traditional medicines

- Study, analyze composition of traditional medicinal formulations and use, synthesis as pharmaceutical ingredients.



Program Eligibility

- Masters Degree (post 4-year Bachelors) in (Technology/ Engineering/ Architecture/ Medicine/ Science or equivalent in any relevant discipline

OR

- Valid score in National level entrance / fellowship exam (e.g. GATE, UGC-NET, ICMR-JRF) along with a
 - 4-yr Bachelors degree in (Technology/ Engineering/ Architecture/ Medicine/ Science) or equivalent in any relevant discipline
- OR
- M Sc or equivalent (2 years subsequent to a 3 year bachelors degree) in relevant area.



Contact info & Last date for application

Apply @

<https://www.iith.ac.in/phdadmissions/>

Email : admissions@hst.iith.ac.in

Coordinator : **Dr. Ramakrishna Upadrashta**

Website : www.hst.iith.ac.in

Faculty : www.hst.iith.ac.in/faculty

FAQ : www.hst.iith.ac.in/faq

Last Date

25th April 2023



HST @ IITH - 28th Feb 2023

