

IIT-Kgp Rolls out Course to Connect Ancient India to Modern Sciences

It's intended to give students a perspective on the scientific & technological aspect of India's heritage

Prachi.Verma
@timesgroup.com

New Delhi: Indian Institute of Technology (IIT) Kharagpur is looking to connect the dots between ancient India's science and technology and modern sciences by launching a course on History of Science and Technology in Ancient India.

The new course offered by the department of humanities and social sciences seeks to find out the contribution by Indian science and technology to the modern sciences, and show how modern sciences can be used to look at heritage.

"The study of history of science and technology of India from ancient times to colonial times is a critical component of IIT Kharagpur's Science & Heritage Initiative (SANDHI)," said IIT Kharagpur director Partha Pratim Chakrabarti.

"It is directed towards research, documentation, preservation and dissemination of the rich confluence of our civilisational heritage in science, technology, culture, language, architecture, design and its intricate connections with the rest of the world," said Chakrabarti, who conceived this course.

At most IITs, research projects are being pursued on ancient Indian science and technology but nothing has transformed into courses



ZAHID ALI

for students as yet, a professor at IIT Delhi said.

The course would give participants an overview of some of the chief landmarks in the development of science in India, especially in the fields of mathematics, physics, astronomy, chemistry and medicine.

It is intended to give students a perspective on the scientific and technological aspect of India's heritage. "The idea is not to romanticise Indian or oriental ideas, but to be conscious of the several other knowledge systems that the euro-centric knowledge system, which we have grown used to, ignores,"

said Jenia Mukherjee, who teaches the relation between science and humanism in this course.

Anuradha Choudry, one of the coordinators of the course, said, "We are also keen to help students understand the entire political, social, economic and philosophical/spiritual context in which these inventions took place and, most importantly, we are trying to help situate all this in the global scenario of that time."

The course is being offered for both the spring (January to June) and autumn (July to December) semesters as a regular three-credit elective course.

The syllabus covers classical Indian astronomy and its transmission, global influences; mathematics in Vedic and post-Vedic texts, the Kerala School of Mathematics, and traditions of computational techniques. Other components include medicine and health sciences and technology, including Ayurveda, Ayurgenomics—an offshoot of the study of Ayurveda with genetics—yoga psychology, contribution of some ancient Indian physicists, allied sciences and technology that looks into advances ancient Indians made in architecture, civil engineering, metallurgy, chemistry and the evolution of measurements.

The institute has identified faculty members of IIT Kharagpur from various departments, who are experts in their own domains. "These expert teachers help connect students of the modern sciences with ancient India, which many of these professors have studied in depth," said Choudry.

All India Council for Technical Education (AICTE), too, in its new curriculum rolled out for engineering colleges (other than IITs and NITs) has included non-engineering courses on subjects such as history of science and technology in India, and readings on Shankara, the early eighth century Indian philosopher and theologian who consolidated the doctrine of Advaita Vedanta.