

Pimpri Chinchwad Education Trust's
Pimpri Chinchwad College of Engineering
SECTOR NO.26, PRADHIKARAN, NIGDI, PUNE 411044

An Autonomous Institute Approved by AICTE and affiliated to SPPU, Pune

DEPARTMENT OF APPLIED SCIENCES AND HUMANITIES



**Syllabus of
Indian Knowledge System (IKS)
of
F. Y. B.Tech.
(Common to all branches)
(Course 2023)**

"Knowledge Brings Freedom"



Effective from Academic Year 2023-24

Program:	B. Tech. Engineering			Semester: II		
Course:	Indian Knowledge System(IKS)			Code: BSH22H05		
Teaching Scheme				Evaluation Scheme		
Lecture	Tutorial	Credit	Hours	IE1	IE2	Total
02	-	02	02	25	25	50
Prior knowledge :nil						
Course Objectives: This course aims at enabling students, 1. To familiarize with the concepts of Indian Knowledge System 2. To get acquainted with the applications of Indian Knowledge System						
Course Outcomes: After learning the course, the students will be able to: 1. Demonstrate elementary knowledge of various ancient Indian Knowledge Streams 2. Identify/Select Indian Knowledge Stream of Interest 3. Evaluate the chosen aspect Indian Knowledge Stream which in turn may be of assistance in the career of the learner						
Guidelines for students: The curriculum of IKS at PCCoE is formulated on the following fundamental principles of NEP: 1. Flexibility, so that learners have the ability to choose their learning trajectories and programmes, and thereby choose their own paths in life according to their talents and interests. 2. No hard separations between arts and sciences, between curricular and extra-curricular activities, between vocational and academic streams, etc. in order to eliminate harmful hierarchies among, and silos between different areas of learning 3. Multidisciplinary and a holistic education across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world in order to ensure the unity and integrity of all knowledge 4. Ethics and human constitutional values like empathy, respect for others, cleanliness, courtesy, democratic spirit, spirit of service, respect for public property, scientific temper, liberty, responsibility, pluralism, equality, and justice 5. Promoting multilingualism and the power of language in teaching and learning 6. Focus on regular formative assessment for learning rather than the summative assessment that encourages today's coaching culture 7. A rootedness and pride in India, and its rich, diverse, ancient and modern culture and knowledge systems and traditions The marking scheme is as mentioned below with the guidelines: IE1 : 25 Marks A MCQs based test to be conducted on 50 questions, each question with 1 mark weightage. 50 marks to be normalized to 25 marks. IE2 : 25 Marks Students are required to undertake a mini project related to a deeper aspect of the chosen stream of knowledge system by A. Through a field visit and study B. Undertake a mini project of a deeper aspect of the chosen stream of knowledge and prepare a report on the elementary aspects of chosen stream of knowledge [15 marks] C. Deliver a short presentation on the report [10 marks]						

Detailed Syllabus		
Unit	Description	Duration(H)
I	Indian Knowledge System – Philosophy and Culture A.Philosophy Introduction to Sāṃkhya, Vaiśeṣika, Nyaya, Pūrva-Mīmāṃsā, Vedānta, Ashtanga Yoga–Yamas,Niyamas, Āsana, Prāṇāyāma, Pratyāhāra, Dhāraṇā, Dhyāna, Samādhi B.Culture Foundational aspects of Sangeeta, Natya Shastra, Shilpashastra	15
II	Indian Knowledge System – Economics,Science and Technology Ayurveda, Architecture and Planning, Metallurgy and Material Science, Astronomy, Kautalya Arthashastra	15
	Total	30
Learning Material: <ol style="list-style-type: none"> 1. Mahadevan,B., Bhat Vinayak Rajat, Nagendra Pavanan R.N. (2022), “Introduction to Indian Knowledge System: Concepts and Applications”,PHI Learning Private Ltd. Delhi. 2. Dharampal (2021), “Indian Science and Technology in the Eighteenth Century”,ISBN-10:8175310936. 		
Reference Books: <ol style="list-style-type: none"> 1. Kapil Kapoor, Avadhesh Kumar Singh.(2005), “Indian Knowledge Systems”, (Vol.1 and Vol.2), ISBN-10:9788124603369. 		