

**ACADEMIC AFFAIRS OFFICE
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
Roorkee – 247667**

No. Acd./ 5568/Senate-99

Dated: January 31, 2024

Head of all Departments/Centres/School

Subject: Renaming of the course 'Indian Knowledge System' as 'Introduction to Indian Knowledge system' (Item No. 99.14)

The Senate in its 99th meeting held on 03.01.2024 has approved the proposal for renaming of the course 'HSI-102: Indian Knowledge System' as 'IKS-102: Introduction to Indian Knowledge system' along with its syllabus.

The approved syllabus is attached as **Appendix-A**.


**Assistant Registrar
(Curriculum)**

Copy to (through e-mail):-

1. Chairman, Senate & Director
2. All faculty
3. Dean, Academic Affairs
4. ADoAA (IT Systems & Admission)/ (Curriculum)/ (Evaluation)
5. Deputy Registrar, Academic Affairs Office
6. Assistant Registrar (Evaluation)
7. Meeting Section
8. Channel i/ AIS (acad.iitr.ac.in)/ Academic webpage of iitr.ac.in

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
NAME OF DEPT. /CENTRE: Centre for Indian Knowledge System

Subject Code: IKS-102 **Course Title:** Introduction to Indian Knowledge System
L-T-P: 2-0-0 **Credits:** 02 **Subject Area:** HSSC

Course Outlines:

Overview of various streams of knowledge in India and classification of ancient Indian texts, Psychology from Indian perspective, Yoga and Indian Linguistics, Indian Mathematics and Astronomy, Medicinal traditions in India- An Introduction to Āyurveda, Indian Architecture and Planning- Traditional measurement system used in Vāstuśāstra, Economics, Management and Governance-An overview of Indian economic thought–Arthaśāstra and Nitiśāstra, Leadership and Motivation.

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPARTMENT / CENTRE: Centre for Indian Knowledge System

1. **Subject Code:** IKS-102 **Course Title:** Introduction to Indian Knowledge System
2. **Contact Hours/Week:** L: 2 T: 0 P: 0
3. **Exam Duration (Hrs.):** Theory: 2 Practical: 0
4. **Relative Weightage:** CWS: 20-35 PRS: 0 MTE: 20-30 ETE: 40-50 PRE: 0
5. **Credits:** 2 6. **Semester:** Spring 7. **Subject Area:** HSSC
8. **Pre-requisite:** Nil
9. **Objective:** To provide an overview of different knowledge systems originated in India.
10. **Details of the Course:**

S.No.	Contents	Contact Hours
1.	Introduction and foundational concepts of IKS: Overview of various streams of knowledge in India and classification of ancient Indian texts; Various philosophical systems of India and fundamental principles inlaid in them	04
2.	Psychology from Indian perspective, Yoga and Indian Linguistics: Introduction to Ashtāṅga Yoga; Rasa Siddhānta of Nāṭyaśāstra (theory of emotions), Pāṇini's contribution to linguistics; Contributions of the Vākyaśāstra and Pramāṇaśāstra to linguistics	05
3.	Indian Mathematics and Astronomy: An overview of Indian mathematics, Development of arithmetic geometry and Trigonometry; Introduction to spherical geometry and calculus in India. Vedic system of arithmetic computation, Vedic sutra for arithmetic computation An introduction to Indian Astronomy, Pre and Post Siddhantic period	09

4.	Medicinal traditions in India: An Introduction to Āyurveda; Distinct features of Āyurveda, as compared to Alopathy; Excerpts from Sūtrasthāna	03
5.	Indian Architecture and Planning: Traditional measurement system used in Vāstuśāstra; Prescriptions for residential Vāstu, City planning as per Vāstuśāstra	03
6.	Economics, Management and Governance: An overview of Indian economic thought–Arthaśāstra and Nitiśāstra, Leadership and Motivation, Planning and Organizing, Financial Management etc.	04
Total		28

11. Suggested Books:

S.No.	Name of Authors /Books / Publishers	Year of Publication/Reprint
1.	Introduction to Indian Knowledge System, B. Mahadevan, V. R. Bhat, Nagendra Pavana R. N., PHI.	2022
2.	Yoga System of Patanjali, J. H. Woods, Bharatiya Kala Prakashan	2009
3.	Indian Philosophy – Vol I and II, S. Radhakrishnan, Oxford University Press.	2009
4.	Mayamatam – Indian Treatise on Housing, Architecture and Iconography (2 volumes), Bruno Daegens, Indira Gandhi National centre for Arts.	2007
5.	Vedanta and Management: Relevance of Vedantic Concepts in Modern Management Practices, N. V. Dave, Deep & Deep.	2002
6.	Tantrasaṅgraha with detailed Mathematical Explanatory Notes, K. Ramasubramanian, M. S. Sriram, Hindustan Book Agency.	2011
7.	Karanapadhati of Putumana Somayaji, Venkateswara Pai, Ramasubramanian, M. S. Sriram and M.D. Srinivas, Hindustan Book Agency	2018
8.	Pāṇini's grammar: An overview, Bhate. S, Sahitya Academy, New Delhi	2002
9.	The Nighaṇṭu and the Nirukta of Śrī Yāskācārya, Sarup. L, Motilal Banarsidass Publishers	2015
10.	The Vedāṅga Literature, Archak K.B. Kaveri Books, New Delhi,	2012
11.	Textbook of Ayurveda: Volume 1 - Fundamental Principles of Ayurveda, Vasant Lad, Ayurvedic Press; UK ed. Edition	2002
12.	Glimpse into Kautilya's Arthashastra, Ramachandrudu P., Sanskrit Academy, Hyderabad.	2010
13.	Vedic Mathematics, Jagadguru Swami Sri Bharati Krsna Tirathji Maharaj, Motilal Banarsidass Publishers, Delhi	1965
14.	Lilavati Bhaskaracarya: A Treatise of Mathematics of Vedic Tradition, K S Patwardhan, S A Naimpally and Shyam Lal Singh, Motilal Banarsidass Publishers Pvt Ltd, Delhi	2006