





भारतीय ज्ञान संवाहिनी - १

IKS Division Internship Program 2022-2023

Application and Instructions

Website for proposal submission: iksindia.org

Dates to Remember

Announcement of Internship program	June 14, 2022
Mentor Applications Due	June 25, 2022
Mentor Projects Selection Announced	June 27, 2022
Internship Applications Open	June 27, 2022
Internship Applications Closed	July 8, 2022
Internship Selections Announced	July 13, 2022
Internship Starts	July 15, 2022
Progress Report Due	August 15, 2022
Final Report Due	September 15, 2022

Please direct any questions to team IKS (coiks@aicte-india.org).

Please submit your Mentor Application here:

https://forms.gle/5i2nWRQuFMuHAHpB7

About IKS Division

Home to the oldest continuously living civilization of the world, the Indian subcontinent was the knowledge and manufacturing powerhouse of the world for most of the known history. A Dharmic culture that emphasized the development of all dimensions of humanity with an emphasis on living in harmony with oneself, one's environment, and the universe at large. It is becoming very apparent with the recent developments around the world that the current models of development are unsustainable and are in direct conflict with nature. The rising inequalities around the world in capitalist systems and the failure of communist/socialist economics point to a dire need for new paradigms of development.

There is an Indian way that is both sustainable and strives for the welfare of all. If we want to become the Knowledge Leader in this century and be the 'Viśvaguru', it is imperative that we understand our heritage and teach the word the 'Indian way' of doing things. Therefore, the IKS Division of Ministry of Education at AICTE was established with a vision to promote interdisciplinary and transdisciplinary research on all aspects of Indian Knowledge Systems (IKS), preserve and disseminate IKS knowledge for further research, and societal applications.

Functions of IKS division:

- 1) Facilitate and coordinate the interdisciplinary work done by various institutions in India and abroad including Universities, institutions of national importance, R&D laboratories and different ministries.
- 2) Establish, guide and monitor subject wise interdisciplinary research groups comprising of researchers from institutes and centers and individuals.
- 3) Create and promote popularization schemes.
- 4) Facilitate funding of various projects and develop mechanisms to undertake research.

Overview of the IKS Internships Program

There is a strong need to promote IKS in the country in traditional schools and STEM educational institutes which will be addressed by this initiative. *The IKS Internship program is designed to encourage and enthuse youth to take up deeper study of various topics related to IKS in Bharateeya Bhashas.* The focus is to create opportunities for students to contribute and be involved in active research during the summer breaks or anytime during the year. The applications for internships are being solicited through a country-wide open application process. The applicants are required to select a project that they are interested to work. The list of projects along with the names of the mentors, their location will be made available to the interns in Annexure 1. The interns will be selected following a selection process described later in the document. The selected interns will be paired with the mentors to work on various IKS projects. The interns are expected to work on the projects allocated to them.

The progress in the internship will be monitored through the monthly report submitted by the intern and the mentor's feedback. The interns will submit a comprehensive project report at the end of their internship. Interns will be encouraged to continue to work with the experts and further advance the area of research through further collaborations even after the completion of the internship program. All intern abstracts after a quality check will be made publicly available to help disseminate the results among the IKS community.

<u>Eligibility:</u> Any student studying in traditional or regular academic institutions of India is eligible for the internships. The students must be between 18-28 years of age and must have a solo bank account linked with Aadhar card with updated KYC. Interns who were already part of the IKS internships cannot apply.

Nature of Support: Each intern will be awarded a stipend (@ 10,000/month for two months + 5,000 total for travel and other miscellaneous expenses for a maximum of 25,000/two months-intern) for the duration of two months as per existing AICTE norms.

Guidelines for Mentors

To achieve the above goal, we need such mentors who may be Teachers, Professors or Acharyas etc. who are well-versed in the conventional subjects as well as in the IKS. Mentors may also be associated with the field of IKS. The topic of Internship can be on any of the themes listed in the Table 1 below. Mentors can also choose other IKS areas as per their specialization but the area must be in IKS domain. Please make sure while selecting the number of interns, that your valuable time will definitely be available to them.

Expectations from the mentors: The mentors are expected to spend 3-4 hours per week or more as needed to introduce the IKS project to the student and provide references to literature that the student is expected to know thoroughly understand. The interns will work with the mentor to conduct the literature search, experiments, field visits as per the project requirements. The mentors will help the interns in the preparation of the progress and final reporting by providing editorial oversight for factual correctness of the information in the report. In case of non-performance of the specified work by the interns, mentor is expected to report to the IKS division by email detailing the issue so that necessary action including the termination of the internship can be pursued.

Eligibility:

- Faculty members in any recognized educational institution, Acharyas in any Gurukula or Pathashala, practicing artists with a minimum of 5 years' experience in teaching and learning in the IKS domain of their expertise.
- Any person currently pursuing any degree is NOT eligible to be a mentor.

<u>Recognition for Mentors:</u> Mentors are the key to the success of the IKS internship program. We highly respect your passion and are grateful for selflessly spending your time and effort to teach the younger generation about the IKS. Mentors will be recognized with a certificate from the IKS Division. The mentor's names will also be displayed on the IKS website.

Mentor identification process

- 1. Mentors must complete the Google form with the details of their expertise, details of the project (a 500-word description is required; please see below), the minimum qualifications of the interns, any preferred skills in the interns etc. before the deadline.
- 2. Project Description: The project description must consist of a brief background of the topic, relevance to the IKS Division mission, clear and specific goals, clearly specified measurable outputs, and the expected number of hours an intern is required to spend to complete the project. Projects that have clear goals and specific measurable outputs and are relevant to the IKS area will be given preference for selection. The project description must be under 500 words and can be submitted in any Bharatiya Bhasha. Please note that this description will be shared with the interns.

- 3. After completion, the projects descriptions submitted by the mentors will be internally evaluated by the IKS team to see how well they match with the themes provided in Table 1. Projects that are only marginally related to the IKS themes and are without substantial IKS content will be rejected (please see the note 1 regarding what does/does not qualify as a valid IKS project).
- 4. Selected projects will be posted on the IKS website and circulated among the interns. Interns who meet the qualifications specified in the project submission forms will be shortlisted and the mentors will make the final selection of the interns.
- 5. The decision to select a project will be made primarily based on its relevance to the IKS division's mission, how closely the project align with the thematic areas indicated here and prior experience of the mentor in the IKS area.
- 6. A mentor can submit multiple projects for submission. These projects must be significantly different from each other in their objectives and deliverables. However, the allocation will be prioritized to have as many mentors as possible.
- 7. The decision of the IKS Division regarding the selection of the project will be final.
- 8. The IKS division will try to identify mentors if there are interns without mentors from a particular geographical location.
- 9. Mentors are encouraged to ask potential interns to apply.

Note 1* For the purposes of this program, IKS is defined as the systematized knowledge that is created by Indians in Indian subcontinent over the millennia and has been transmitted through oral traditions, manuscripts, texts, and traditional practices. The IKS exists in all Bharateeya Bhashas in multiple forms. Projects must have significant input of the traditional knowledge. Significant input here means that the project must involve a study of the primary or secondary sources of IKS related literature. Project solely based on modern knowledge systems and modern scientific methods and analysis do not qualify as IKS projects. However, use of modern scientific analysis and tools to study IKS literature is highly encouraged. See the Table 2 below for specific examples.

Table 1. Thematic areas of IKS Internship

- Veda and Upavedas (for example Rigveda, Yajurveda, Dhanurveda, Gandharvaveda, etc.)
- Darshanas (ex. 6 Astika and 6 Nastika Darshanas) and Shastras (Nyaya, Vyakarana, Natya, Sangeeta, Jala, Khani, among others)
- 3. Sahitya and Kala (ex. Thirukurral, Meghadutam, Avadhana, Nritya, Chitra, Vaadya, Kalaripayattu, etc.)
- 4. Holistic Medicine and Wellness (Siddha, Ayurveda, Unani, Charaka Samhita, Sushrut Samhita, Ashtanga Hridayam, etc.)
- 5. Indian Psychology and Yoga (Ex. Patajali Yogasutras)
- 6. IKS based approaches to the Economics, Governance, and Political Systems (ex. Chanakya Arthashastra, Vidura Neeti, Dharma Shastras, etc.)
- 7. IKS based approaches on Knowledge Paradigms (Ex. Tantra Yukti)
- 8. Mathematics, Mensuration and Astronomy of India; (ex. Aryabhatiya, Bijaganita, Lilavati, Jain Mathematics, etc.)
- Observational Astronomy and Calendar Systems (Panchanga, Jyotisha, Suryasiddhanta, Grahalaghava, Siddhanta Darpana, etc.)

- Ship building, Navigation and Maritime Traditions (ex. Yuktikalpataru, Jataka Stories, Sangam Literature, Samarangana Sutradhara etc.)
- 11. Chemistry in India (ex. Rasaratnakara, Rasaratna Samuchhaya, Rasachintamani,etc.)
- 12. Physics in India (ex. Vaisheshika etc.)
- 13. Architectural engineering, town planning, civil engineering, Vaastu and Shilpa Shastra (Ex. Narada shilpa Shastra, Samarangana Sutradhara, Mayamatam, etc.)
- 14. Sustainable Agriculture and Food Preservation Methods (ex. Krishi Parashara, Vishvavallabha, Vrikshayurveda, etc.)
- 15. IKS approaches for Development and Management of Water Resources (Ex. Brihadsamhita etc.)
- 16. IKS approaches to Conserve
 Biodiversity and Ecological Protection
- 17. Novel Materials, Metallurgy and Material Sciences (ex. Manasollasa, Yuktikalpataru, Rasaratnakara, Rasachintamani, etc.)
- 18. Preservation and Documentation of Manuscripts

<u>Guidelines for the projects:</u> The projects must strictly be related to IKS themes. Projects must have clear scope that can be completed by interns in two months. The projects must have clear quantifiable deliverables. Writing a comprehensive report is required for all projects. For projects that involve performing arts, a comprehensive multimedia documentation is expected.

Table 2. Examples of what qualify/do not qualify as an IKS project

Is an IKS project	Is NOT an IKS project
Study of mortar composition used in older bridges/forts/temples.	Study of bridges and ships in a locality.
Documenting and evaluating the water treatment methods practiced by communities.	Monitoring plastic pollution in a river.
Studying the relevance and applicability of Chanakya's Arthashastra is relevant for solving current societal problems.	Studying the Economic theories of Adam Smith or MMT.
Study of port construction in Dholavira and Lothal and estimating the capacity of those ports.	Studying ships in a port.
A study of the influence of Sanskrit Education on the cognitive abilities of the students.	Visiting schools to see how Sanskrit Education is imparted.
Identifying the contextual and etymological meanings of the words (ex. Dharma, Nyaya, Papa, Punya) in a Purana for the current societal context.	Enumerating the occurrences of words (ex. Dharma, Nyaya, Papa, Punya) in a Purana

Guidelines for Interns (TENTATIVE)

<u>Expectations from the interns:</u> Interns are expected to work sincerely under the mentor to work on the IKS project. The intern is expected to use the time during internship to develop a comprehensive understanding of the topic. The intern is expected to prepare and present the progress and final report drafts to the mentor at least one- two weeks in advance so that sufficient time for critical review. The interns are expected to write a social media article (Facebook/YouTube) describing their project to general audience.

<u>Eligibility:</u> Any student studying in traditional or regular academic institutions of India is eligible for the internships. The students must be between 18-28 years of age and must have a bank account. Interns who were already part of the IKS internships cannot apply.

<u>Nature of Support:</u> Each intern will be awarded a stipend (@ 10,000/month for two months + 5,000 total for travel and other miscellaneous expenses for a maximum of 25,000/two months-intern) for the duration of two months as per existing AICTE norms.

Submission and selection process:

- 1. Choose an expert you would like to work with from the annexure I of this document.
- 2. Indicate one Bharateeya Bhasha you can speak, read and write. The internship will be primarily conducted in this language. Please note that one of the shortlisting criteria is the common Bharateeya bhasha between the Mentor and Intern. Once selected, you cannot change the language during the internship.
- 3. Submit your application on the IKS India Website before the deadline.
- 4. Selections will be made by the IKS division with the help of mentors based on the minimum and preferred qualifications, matching of the interests, commonality of the Bharateeya bhasha, the location of the student and mentor, and our ability to fund the students. Mentors will be presented the credentials of the applicants and consulted in the selection process.
- 5. The decision of the IKS Division in the selection process and allotment of the projects will be final.

During Internship:

- 1. You will be intimated of your selection as per the deadline on the first page of the document.
- The internship will take place in physical mode at the institute of mentor or at the place of project. In some exceptional cases, the second month internship can be in the partial physical mode. However, an advance permission from the IKS Division after submitting proper documentation is needed.
- 3. Contact your mentor expert and start your work under their guidance.
- 4. Prepare a progress report (Please refer to Annexure II for the format) at the end of one month and submit it online. The progress report must be in one of the Bharateeya Bhashas you have identified at the beginning of your internship. Your first month fellowship will be released after receiving the progress report.

- 5. Prepare a final report (Please refer to Annexure III for the format) and submit it at the end of your internship. The final report must be in one of the Bharateeya Bhashas you have identified at the beginning of your internship. Your second month fellowship along with the miscellaneous expenses will be released after receiving the final report endorsed by the expert mentor.
- 6. There will be a mid-term evaluation meeting with the IKS experts along with the submission of the progress report. IKS Division reserves the right to discontinue internship if there is no satisfactory progress after the first month.

On successful completion of the internship and submission of the final report, the student will be awarded an internship completion certificate by the IKS Division of MoE @ AICTE.

Annexure I

LIST OF MENTORS AFTER FINALIZATION OF THE PROJECTS WILL BE ADDED HERE

Details to be added for each selected project:

- 1. Mentor Name, Designation, Affiliation
- 2. Project Description
- 3. Minimum Qualifications of intern
- 4. Preferred Qualifications of intern
- 5. <u>Bharateeya Bhashas in which proficiency in reading, writing and speaking is required</u>
 (Any one from the following list)

Annexure II

IKS Internship Progress Report Format

The primary objective of the progress report is to document the work performed in during the internship. The report should specifically address why and how the work undertaken during the internship is relevant to the Indian Knowledge Systems.

The report must be comprehensive in scope and demonstrate integration of Indian Knowledge Systems and the existing knowledge. A detailed background, methods, procedures, literature review, and the discussion of the results must be presented. The main body of the final report excluding references and appendices will be approximately 2500 words (about 5-7 pages, in 12-point Font single spacing) and may include any number of figures or appendices.

<u>IMPORTANT Note of Plagiarism</u>: Plagiarism in any form is strictly prohibited. Any report containing plagiarized material will be disqualified and the internship will be forfeited, and no certificate will be issued. We may use automatic plagiarism detection tools like Turnitin to detect plagiarism in the reports.

The report must be structured as follows:

Title Page

- Clear, concise title that is descriptive of the subject of the report.
- Author names (intern and the Mentor), affiliations, and publication date clearly shown
- Clearly mentions that this work was performed under IKS Internship program

Table of Contents (if appropriate)

- _ Main section and subsection headings are labeled, and their page locations shown
 - Lists of figures, tables, and appendices shown, if appropriate.

Abstract

- Abstract must convey the key content of the report, includes the purpose, scope, and preliminary results (250 words).
- An English translation of the abstract must also be provided.
- There must be no references, inappropriate jargon, abbreviations or acronyms in the abstract

Introduction

Establishes the status quo and justification of the project; summarizes the purpose and scope of the report; states why and where the project was conducted

Background and/or Justification

- Describe the Indian Knowledge System component that is being investigated in complete detail.
 (A minimum 250 words)
- Describes the problem addressed by this project and the objectives and scope of the project. Include a diagram of the problem, if appropriate.
- Describes previous studies conducted in this field that are reported in the literature. If no previous studies have been conducted, please indicate that clearly.

Description of Project

Discusses, to an appropriate level of detail, the location and size of the project location.

Methods and/or Procedures

- Provides a concise, clear statement of the methods employed, the rationale for selecting the methods, and the theory behind methods, if appropriate, but presents no data
- Provides specific information on the type(s) of data collected and how and why they were collected but does not provide a "blow-by-blow" account of the actions performed in conducting the study. Instead, should give detail sufficient for the reader to interpret and repeat your results.

Results

- Clearly and concisely presents the factual results of the project; avoids theory, opinions, and information from other studies
- Presents results in an organized fashion, in the same order in which the project objectives were presented, and ties them to the project objectives
- Tables and figures are used, as appropriate, to summarize and illustrate important findings. Tables and figures are appropriately located, captioned, numbered, and cited in the text of the report. Tables and figures are sufficiently complete and explained will enough that the reader is not required to refer to other sections of the report in order to understand them

Discussion

- Provides clear, concise interpretation of the results of the project. Ties together concepts to create something an interpretation that is greater than the individual results.
- Relates results back to the objectives of the project and to previous studies reported in the literature, if appropriate
 - Discusses uncertainties and assumptions that influenced the results

References

Presents an appropriately formatted list of all literature cited in the report

Appendices

- _ Include data, calculations, other supporting information, and additional detail on the scope of work, pertinent background information, and methods and procedures, as appropriate
- Include only appendices that have been cited in the body of the report
- _ Include only materials not essential for understanding the body of the report. If essential for understanding the body of the report, they should be included in the body of the report.

Annexure III

IKS Internship Final Report Format

The primary objective of the final report is to document the work performed in during the internship. The report should specifically address why and how the work undertaken during the internship is relevant to the Indian Knowledge Systems, how

The report must be comprehensive in scope and demonstrate integration of Indian Knowledge Systems and the existing knowledge. A detailed background, methods, procedures, literature review, and the discussion of the results along with the conclusions and recommendations must be presented. The main body of the final report excluding references and appendices will be approximately 8000 words (about 16 pages, in 12-point Font single spacing) and may include any number of figures or appendices.

<u>IMPORTANT Note of Plagiarism</u>: Plagiarism in any form is strictly prohibited. Any report containing plagiarized material will be disqualified and the internship will be forfeited, and no certificate will be issued. We may use automatic plagiarism detection tools like Turnitin to detect plagiarism in the reports.

The report must be structured as follows:

Title Page

- _ Clear, concise title that is descriptive of the subject of the report.
- Author names (intern and the Mentor), affiliations, and publication date clearly shown
- Clearly mentions that this work was performed under IKS Internship program

Certificate of Originality

- Author and Mentor certification on originality and absence of plagiarism
- Following declaration (Adapted from IIT Bombay Thesis Declarations) must be made on this page and signed by the Intern and verified by the Mentor. All reports must include this declaration to be acceptable. There will be NO EXCEPTIONS to this requirement.

"I declare that this report represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I declare that I have properly and accurately acknowledged all sources used in the production of this report. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be a cause for disciplinary action by the IKS Division and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed."

Table of Contents (if appropriate)

- _ Main section and subsection headings are labeled, and their page locations shown
 - Lists of figures, tables, and appendices shown, if appropriate.

Abstract

- An abstract conveys the key content of the report, includes the purpose, scope, results, and conclusions of the report (250 words).
- A second abstract must be written in English.
- There must be no references, inappropriate jargon, abbreviations or acronyms in the abstract

Executive Summary

- An executive summary presents a clear, concise summary, of appropriate length and level of detail, of the contents of the main body of the report and of summary tables and figures, as appropriate. (Typically, 1000-1500 words)
- An English translation of the Executive summary must also be provided.
- _ There must be no references, inappropriate jargon, abbreviations or acronyms in the executive summary

Introduction

Establishes the status quo and justification of the project; summarizes the purpose and scope of the report; states why and where the project was conducted

Background and/or Justification

- Describe the Indian Knowledge System component that is being investigated in complete detail.
 (A minimum 500 words)
- Describes the problem addressed by this project and the objectives and scope of the project. Include a diagram of the problem, if appropriate.
- Describes previous studies conducted in this field that are reported in the literature. I no previous studies have been conducted, please indicate that clearly.

Description of Project

Discusses, to an appropriate level of detail, the location and size of the project location.

Methods and/or Procedures

- Provides a concise, clear statement of the methods employed, the rationale for selecting the methods, and the theory behind methods, if appropriate, but presents no data
- Provides specific information on the type(s) of data collected and how and why they were collected but does not provide a "blow-by-blow" account of the actions performed in conducting the study. Instead, should give detail sufficient for the reader to interpret and repeat your results.

Results

- Clearly and concisely presents the factual results of the project; avoids theory, opinions, and information from other studies
- Presents results in an organized fashion, in the same order in which the project objectives were presented, and ties them to the project objectives
- Tables and figures are used, as appropriate, to summarize and illustrate important findings. Tables and figures are appropriately located, captioned, numbered, and cited in the text of the report. Tables and figures are sufficiently complete and explained will enough that the reader is not required to refer to other sections of the report in order to understand them

Discussion

- Provides clear, concise interpretation of the results of the project. Ties together concepts to create something an interpretation that is greater than the individual results.
- Relates results back to the objectives of the project and to previous studies reported in the literature, if appropriate
- Discusses uncertainties and assumptions that influenced the results

Conclusions and/or Recommendations

Presents conclusions that clearly summarize key findings

- Furnishes direct responses to the project objectives stated earlier in the report
- Provides clear recommendations based on the results of the project, if appropriate
- Describes future work that should be performed, if appropriate

Acknowledgements

Acknowledges extensive and significant assistance by persons other than the authors, as well funding agencies, if appropriate.

References

- Presents an appropriately formatted list of all literature cited in the report

Appendices

- Include data, calculations, other supporting information, and additional detail on the scope of work, pertinent background information, and methods and procedures, as appropriate
- Include only appendices that have been cited in the body of the report
- _ Include only materials not essential for understanding the body of the report. If essential for understanding the body of the report, they should be included in the body of the report.