

Indian Knowledge System and Mental Health Applications

Call for M.A./M.S.(R)/M.Tech (by research)/Ph.D/Dual Degree Program (Jul-Dec, 2025)

IIT Mandi invites applications from bright and dedicated young scholars interested in joining the full-time M.A/M.S.(R)/M.Tech(R)/Ph.D/M.Tech(R)+Ph.D.(Dual Degree) - program in the **Indian Knowledge System and Mental Health Applications (IKSMHA) Centre at IIT Mandi**. For this purpose, the IKSMHA Centre seeks applications for the M.A/M.S.(R)/M.Tech(R)/Ph.D/M.Tech(R)+Ph.D.(Dual Degree) - programs in the following areas:

Discipline	Broad Research Area	Driving Research questions
Indian Knowledge System (M. Tech_R/PhD/Dual degree)	Integrative study of body, mind, and consciousness	- Laws of Semantics and Foundations of Psychology
	Scientific characterization of brain network with the intervention of Yoga and Meditation	- What are the cognitive biomarkers of consciousness?
	Learning Mind-brain paradigm from Ayurveda	- How do we measure and improve states of epistemic curiosity (or lack of cognitive inertia)?
	Mind-brain paradigm in Bhagavata Samkhya	- What are the cognitive biomarkers of creativity and the effect of IKS interventions?
	Traditional Indian Medicine Research for Mental Wellbeing	- What is the connection between consciousness and sleep states?
	Indian Performing Arts and Cognition	- How to investigate dreams and the contents of dreams?
Cognitive Science (M. Tech_R/PhD/Dual degree)	Cognitive Neuroscience	- How to evaluate the level of sleep and enhance sleep and dream quality?
	Cognitive Psychology	- How does physiological data relate to common yoga practices?
	Cognitive Technology and Bio/Neurofeedback	- What are the relations between neural, physiological, and molecular signatures, and how are they affected by IKS-based interventions?
	Judgment and Decision Making	- Use of neurofeedback and biofeedback mechanisms to improve meditation and yoga practices
	Mental Health	- How does one assess the importance of intention and goodness from the perspective of cognitive biomarkers?
Virtual Reality and Sensors (M. Tech_R/PhD/Dual degree)	Virtual Reality Applications	- Could computer vision and VR applications improve yogasana practices?
		- Could Mantra chanting and tDCS in Virtual Reality (VR) improve mental conditions? Can this improvement be predicted via machine learning methods?
		- What is the relationship of Prakriti on the effectiveness of meditation therapies for psychological and lifestyle disorders?
		- Could machine learning predict a person's Prakriti?
		- Could Indian music and dance therapies help improve clinical cases of mental and lifestyle disorders?
		- How do we personalize music and dance therapies (e.g., based on the Prakriti of the subject or other factors)?

	Bio/Neuro/Physiological Sensing	<ul style="list-style-type: none"> -How can IKS interventions aid in the cases of deaddiction? -How to develop translational technology based on IKS interventions for clinical and home-based setups?
Mental Health Applications (M.Tech_R/PhD/Dual degree)	Depression, Stress and cognitive loading, Sleep Disorder, Autism, Alzheimer's, Parkinson	<ul style="list-style-type: none"> -What are the biomarkers of mental health conditions? -Could interventions from the Indian knowledge system improve mental health conditions?
Music and Musopathy (M.S. (R)/PhD)	<ul style="list-style-type: none"> -Music therapy, technology, and healthcare for mental and lifestyle disorders -Music cognition and musopathy—exploring the fundamental mechanics of music benefits in a culture-neutral context 	<p>Career Prospects: Graduates will be well-positioned for roles in healthcare, the music industry, research, academia, and wellness organizations. Career opportunities include becoming Musopathists, research analysts, and music technology specialists.</p> <p>Course Overview: The curriculum spans foundational to advanced levels, covering topics like <i>Music and Musopathy Foundation</i>, <i>Music and Cognition</i>, and <i>Introduction to Audio Engineering</i>. Research opportunities are available in addition to coursework, with supplementary courses from the IKSMHA Centre, NPTEL, and Swayam.</p> <p>For more details, please visit the following: -IKSMHA Music and Musopathy Program Details -Course Booklet for MS by Research and PhD in Music and Musopathy</p>
M.A. in Indian Knowledge System	Study in this field encompasses a wide range of topics including Vedic literature, Sanskrit studies, ancient Indian sciences (such as Ayurveda, Yoga, and Mathematics), metaphysical philosophies, and the socio-cultural impact of knowledge in historical and contemporary contexts.	<ul style="list-style-type: none"> -How do ancient Indian philosophies and texts contribute to modern-day discourse on ethics, science, and spirituality? -In what ways can traditional knowledge systems inform current educational frameworks and societal structures? -How can the preservation, reinterpretation, and dissemination of Indian Knowledge Systems be adapted to contemporary challenges? -What are the methodologies for studying the textual and non-textual knowledge forms within Indian traditions? <p>-Graduate Program Course Booklet - Master of Arts in Indian Knowledge System</p>

Link to the online application: <https://iitmandiadm.samarth.edu.in/aug24/index.php/>

It is kindly advised to get in touch with faculty members directly for further information regarding the different

research areas and positions available with them listed at: <https://iksmha.iitmandi.ac.in/research.php>

General Information

Information on eligibility, minimum qualifications, and scholarship rules are briefly provided on the following links:

M.Tech(R) Ordinance and Regulations (O&R) IIT Mandi:

[https://www.iitmandi.ac.in/pdf/ordinances/Ordinances_MTech\(R\).pdf](https://www.iitmandi.ac.in/pdf/ordinances/Ordinances_MTech(R).pdf)

Ph.D. Ordinance and Regulations (O&R) IIT Mandi:

https://www.iitmandi.ac.in/pdf/ordinances//Ordinances_Ph.D.pdf

M.Tech(R)+Ph.D.(Dual Degree) - Regular Ordinance and Regulations (O&R) IIT Mandi:

https://www.iitmandi.ac.in/pdf/ordinances/Ordinances_phd_mtech.pdf

For Masters applicants (Full-Time Research Scholars):

General eligibility criteria for M.Tech. (Research) Admission:

Qualifying Degree:

1. Bachelor's degree in Engineering/Technology or equivalent with a valid GATE score, **OR**
2. Master's or equivalent degree in Science/Arts/Commerce/Management (or allied subjects) with a valid GATE score, **OR**
3. Masters or equivalent degree in Engineering/Technology

Exemptions from mandatory requirements of Valid GATE or National Level examination:

1. B.Tech/B.E./B.S. (or equivalent) degree from CFTI (Centrally Funded Technical Institute)/ any of the top 100 institutes according to NIRF ranking (overall category) at the time of application/ any Himachal Pradesh Govt. institution or universities with CGPA/CPI of at least 7.5 (on a scale of 10) or equivalent.
2. BS-MS/M.Sc/MA/MBA/equivalent from IITs, IISERs, IISc, IIMs, or any of the top 100 institutes according to NIRF ranking (overall category) at the time of application with a CGPA/CPI of at least 7.5 (on a scale of 10) or equivalent.
3. NIRF Ranking (within the top 100) should be in the overall category granted for the year during which admission is sought.

For Ph.D. applicants (Full-Time Research Scholars):

General eligibility criteria for Ph.D. Admission:

Qualifying Degree:

1. Master's or equivalent degree in Engineering/Technology, OR
2. Bachelor's degree in Engineering/Technology or equivalent*, OR
3. Master's or equivalent degree in Science/Arts/Commerce/Management (or allied subjects) *

***For qualifying degree listed under (2) & (3) candidates must also fulfill ONE of the following additional requirements:**

1. Qualified GATE / NET including lectureship (Assistant Professorship) or any other equivalent National level examination.
2. Selected through a National level examination conducted by MoE or its agencies /Institutions such as UGC/ IIT/ IISc. / IISER/ IIIT etc.
3. Minimum of TWO years of professional experience (acquired after obtaining the qualifying degree and completed before the start of the semester in which admission is sought)

***Exemptions from mandatory requirements of valid GATE or National Level examination:**

1. B.Tech/B.E./B.S. (or equivalent) degree from CFTI (Centrally Funded Technical Institute)/ any of the top 100 institutes according to NIRF ranking (overall category) at the time of application/ any Himachal Pradesh Govt. institution or universities with CGPA/CPI of at least 7.5 (on a scale of 10) or equivalent
2. BS-MS/M.Sc/MA/MBA/equivalent from IITs, IISERs, IISc, IIMs or any of the top 100 institutes according to NIRF ranking (overall category) at the time of application with a CGPA/CPI of at least 7.5 (on a scale of 10) or equivalent.
3. NIRF Ranking (within the top 100) should be in the overall category granted for the year during which admission is sought.

For M.Tech(R)+Ph.D.(Dual Degree) - Regular applicants (Full-Time Research Scholars):

Students under this category are entitled to the Scholarship/ Assistantship from Institute / MoE if they qualify for any one of the following criteria.

- The candidate must possess BE/B.Tech or M.Sc. or equivalent Degree with a valid GATE Score for HTRA fellowship.
- B.Tech./B.E. from CFTI institute with CGPA ≥ 8 on a 10.0-point scale (or equivalent), National level examination (GATE/NET) is waived off for HTRA fellowship.

Full details of the programme are available {As per 37th Senate Item No. 37.16} at <https://cloud.iitmandi.ac.in/f/cbc9eb261d8b472d9b25/>

General Eligibility Criteria For M.S. (Research) and Ph.D. Admission In Music & Musopathy:

Eligibility will be as per the norms outlined in the MS and Ph.D. admissions Ordinances. In this program, some traditional degrees from recognized universities like Acharya and others will be considered at par with bachelor's and master's degrees in engineering, sciences, arts, and social sciences. These may include appropriate degrees from accredited music institutions like Kalakshetra, Chennai; Gandharva Maha Vidyalaya Delhi; Chennai Govt Music College, etc., after 3-years of Music Education. The committee may impose additional requirements for eligibility as needed from time to time. For example, the committee can consider weight to Acharyanet and other certifications after 2/3 years of study and All India Radio ratings for performing artists. Students will be enrolled in full-time, part-time, and ERP categories per norms detailed by the Senate IIT Mandi

General Eligibility Criteria For M.A. Admission In Indian Knowledge System:

Eligibility Candidates should hold a minimum 3-year Bachelor's Degree, having secured a minimum of 55% marks or a CGPA of 5.5, with appropriate relaxation for those from certain categories as per Government of India norms. The

admission process is holistic, involving both an aptitude test to gauge the foundational understanding and affinity towards the subjects, followed by an interview to assess the aspirants' motivation and fitment into the program. The MA degree program would be of 2-year duration. Students may be able to exit with a PG diploma in the Indian Knowledge System after 1 year of study.

For Part-time Research Scholars (M.S.(R), MTech(R), Ph.D.)

- Institute Staff Members/Research scholars under QIP/Research Scholars under External Registration/Research Scholars working on a part-time basis
- Individuals employed in R&D environments in Scientific Institutions (including IIT Mandi) or industries
- Faculty members of all engineering colleges/universities are recognized by appropriate government agencies.

The required qualifications remain the same as for regular candidates except for the requirement of qualifying in one of the national entrance tests. Further, the candidate should have at least two years of work experience.

Note: Industrial or Academic Institute Sponsored or Part-time M.S. (R), M.Tech (R), Ph.D., and M.Tech(R)+Ph.D.(Dual Degree) - program candidates are not eligible for MHRD/HTRA scholarships.

Employed candidates seeking admission to M.S.(R)/M.Tech(R)/PhD must submit a 'No Objection Certificate' from their current employer while filling out the application form.

NOC format link: <https://drive.google.com/drive/folders/1pXx4Gx158W6iYsD4jzPw8pLT7klh4oxu?usp=sharing>

For any other queries regarding M.S.(R), M.Tech (R)/Ph.D/M.Tech(R)+Ph.D.(Dual Degree) programs in IKSMHA, please contact the IKSMHA office through email: iksmha-office@iitmandi.ac.in. We look forward to reviewing your application.

For any technical problems regarding filling out online applications, please contact it_helpdesk@iitmandi.ac.in

Application Fee for M. Tech (by research)/Ph.D. Admission:

Category	Amount in ₹
General/EWS/OBC/OBC (NCL)/Transgender/Foreign Nationals	200
Women/SC/ST/PD	100

Mode of Payment: Online within application form.

Important dates:

Start of online application: 17th April 2025 from 05:00 PM

Deadline for online application: 07th May 2025 till 05:00 PM

Date of Interviews: This will be announced shortly after the application deadline for shortlisted candidates. Those not appearing for their interview on the announced date will not be considered further for admission.

Note: IIT Mandi reserves the right to recruit/ not recruit for any of the advertised areas and apply appropriate criteria for shortlisting candidates.