



Research Programmes

Department of Computational and Data Sciences

Indian Institute of Science, Bengaluru



The Department of Computational and Data Sciences offers two degree programmes through research, PhD and MTech (Research). The research activities are broadly categorised into two streams: Computational Science and Computer and Data Systems. The research labs are placed in one of these two streams. Data science and engineering research also span these streams.

Computational Science stream (CDS-CP)

- Deals with computational methods and their application to scientific domains.
- Research topics include biomolecular computation, computational electrodynamics, computational photonics, medical imaging, numerical math and scientific computing, scientific computation, structural biology, and biocomputing.
- Requires skills at the intersection of applied mathematics, application-specific knowledge, and effective use of computing platforms.

Computer and Data Systems stream (CDS-CS)

- Deals with the design, implementation, and evaluation of high performance and scalable computer hardware and software systems.
- Research topics include big data platforms and applications, computer vision, natural language processing, deep learning, database systems, distributed systems, cloud computing, Internet of Things, high performance computing, image and video analytics, machine learning, and middleware and run time systems.

PhD programme

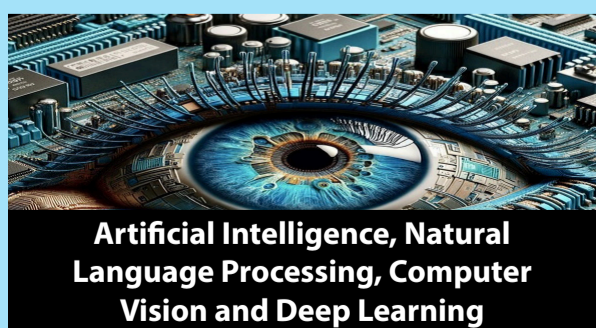
The PhD programme lasts for 3–5 years, with 3–6 courses taken and a research dissertation that is submitted.

MTech(Research) programme

The MTech (Research) programme is for 2 years, with 3–4 courses taken and a research thesis that is submitted.

Admission process

The admission process comprises two phases. Phase I will be an online aptitude test on the HackerEarth platform, which serves as the first part of the evaluation and Phase II will be an in-person oral interview for all candidates who qualified in the aptitude test conducted in Phase I.



ADMISSIONS



MORE INFO

Admissions: <https://admissions.iisc.ac.in/>

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