



# PhD program in *Applied and Computational* *Mathematics* at **TIFR, Bengaluru**

The International Centre for Theoretical Sciences (ICTS-TIFR) and the Centre for Applicable Mathematics (TIFR-CAM) jointly invite applications for doctoral research in Applied and Computational Mathematics. ICTS is a novel institution with a three-pronged mandate: to conduct world-class research in theoretical sciences, to provide a platform to organize various visitor-driven programs for the benefit of the wider scientific community, and to spread scientific temper and the spirit of inquiry through public outreach activities. CAM, on the other hand, located about 10 km from ICTS, is a unique applied mathematics institute in India known for its interdisciplinary research and highly competitive graduate program. Students enrolled in this joint PhD program will enjoy the benefits of being part of the vibrant academic environment at two TIFR Centres in Bengaluru.

The Applied and Computational Mathematics PhD program has research priorities on the following themes: mathematical modeling of climate-ocean-atmosphere processes, compressible flows, numerical methods for partial differential equations, and the application of machine learning and AI in these disciplines. The faculty members associated with this program can be found here: <https://www.icts.res.in/gsacm>. Students with a strong background in computational research, based on semester or year-long thesis work or projects completed under a mentor are especially encouraged to apply for this program.

*ICTS and CAM are committed to building an environment that is inclusive, non-discriminatory and welcoming of diverse individuals. We especially encourage the participation of women and other under-represented groups.*

## HOW TO APPLY

Applicants are eligible to apply to the program if they clear the cut-off score/rank for one of the entrance exams listed below and have a minimum CGPA of 7/10 or equivalent in their previous degree program. The list of entrance exams is as follows:

- TIFR GS exam in Mathematics and Physics.
- GATE exam in Mathematics, Applied Mathematics, Mathematics and Computing, Aerospace Engineering, Civil Engineering, Chemical Engineering, Computer Science and Information Technology, Electronics and Communication Engineering, Electrical Engineering, Environmental Science and Engineering, Instrumentation Engineering, Mechanical Engineering, Naval Architecture and Marine Engineering, Physics, Engineering Sciences, and other related streams. Other related streams will be considered as deemed appropriate.
- CSIR UGC NET (JRF eligible) in Mathematical Sciences, Earth Sciences, and Physical Sciences.

The cut-off scores/ranks for each exam will be announced on the program web page. Eligible candidates can apply by completing the online application form. Based on their application, candidates will be shortlisted for in-person interviews.

The application portal will open in January 2025; for further information please visit the program web page or write to [gs@icts.res.in](mailto:gs@icts.res.in).

## ELIGIBILITY

M.A./M.Sc./M.Math./M.Stat./M.E./M.Tech. and other related Masters degree programs

