IIT KANPUR

INDIAN INSTITUTE OF TECHNOLOGY KANPUR

भारतीय प्रौद्योगिकी संस्थान कानपुर

Inspiring the brightest minds to be greater since 1959

DEPARTMENT OF STATISTICS PLACEMENT BROCHURE

2021-2022

INTRODUCTION

- Established in 1959 as one of the first Indian Institutes of Technology, the institute was created with the assistance of a consortium of nine US research universities as part of the Kanpur Indo-American Programme (KIAP).

- It was declared to be an institute of national importance by the government of India under the Institutes of Technology act.

- The department, since its inception in 1959, has emerged as a national center for excellence in mathematics, statistics and allied areas, in terms of research, teaching and mentoring students.

- The aim of the programme is to cultivate a fine mathematical taste, nurture mathematical interests, motivate research in mathematical sciences and train computational scientists who can work on challenging real life problems.

ABOUT THE PROGRAMME

The 2 year course in Statistics takes admission through Joint Admission Test for MSc (JAM). The JAM exam through which admissions are held for this course is a highly competitive all- India based entrance exam in which the acceptance rate is less than 3%

This program prepares them for a career in different sectors like finance, analytics, banking, insurance, risk management

With a strong focus on innovation, the students are encouraged to perform MSc projects, through which they learn to tackle theoretical as well as industrial and real-life problems

RANKINGS

- Ranked 72 in Asia in the World QS rankings, 2021

- Ranked 25 among the BRICS nations in the World QS rankings, 2020

- Ranked in the band 151-200 for the department of Statistics and Operation Research, 2020

- Ranked 6 among all the universities of India by NIRF, 2020

COURSES

STATISTICS

- Regression Analysis
- Time Series Analysis
- Statistical Inference
- Comp. Programming and data structures
- Applied Stochastic Processes
- Complex Analysis
- Multivariate Analysis
- Statistical simulation and data analysis
- Bayesian Analysis
- Sampling theory
- Asymptotic Statistics
- Linear Model and Matrix Theory
- Non-Parametric Inference
- Design of Experiments & ANOVA
- Probability Theory

INTERDISCIPLINARY COURSES

- Introduction to Machine Learning
- Advanced Statistical Methods for Business Analytics
- Artificial Intelligence
- Probabilistic Machine Learning
- Bayesian Machine Learning
- Data Mining
- Project Management
- Advanced Decision Models
- Game Theory
- Introduction to Computing
- Panel Data
- Numerical Analysis & Scientific Computing.

ECONOMICS & FINANCE

- Introduction to Economics
- Microeconomics
- Macroeconomics
- Econometrics
- Mathematical Finance
- Financial Engineering

COMPUTER SCIENCES

- C programming language
- Data Structures and Algorithms
- Data Mining
- Big Data
- Deep Learning

PROGRAMMING LANGUAGES KNOWN

- R
- Python
- C
- C++
- Java
- Matlab
- SQL
- Octave

Distinguished Faculty

The department takes pride in the distinguished faculty that enriches the deep roots of education in the institute.

There are a total 45 professors, assistant professors and associate professors whose research interests provide a lot of diversity in pure as well as applied mathematics and statistics.

DR. AMIT MITRA

- Guest Researcher at Uppsala University, Sweden
- Visiting Guest Researcher at Ludwig Maximillians University, Munich
- Past Research Officer, Reserve Bank of India
- Research Areas: Statistical Signal Processing, Data Mining in Finance and Economic Time Series

DEBASIS KUNDU

- Ph.D. Penn State University, USA
- Elected as a fellow of the Royal Statistical Society, London (2003)
- Life Member of Institute of Mathematical Statistics, Indian Science Congress & Indian Society of Statistics and Probability
- Contributing Editor of Current Index in Statistics
- Research Areas: Statistical Signal Processing, Non-Linear Regression, Survival Analysis, Statistical Computing

NEERAJ MISHRA

- Past Assistant Professor of Marquette University, USA
- Recipient of Jack Wolfowitz Award 2003
- Recipient of C.L. Chandna Award, 2003
- Research Areas: Statistical Inference, Reliability Theory, Ranking and Selection Problems

DR.SHALABH

- Received the Vigyan Ratna Samman from the Council of Science & Technology, Uttar Pradesh in 2018
- Received the Fellowship of IAMMS.
- Fellow of The Royal Statistical Society, London, U.K.
- Life Member of the National Academy of Science, International Indian Statistical Association, Indian Society of Agricultural Statistics
- Mahalanobis Memorial Award by the Indian Econometric Society
- Humboldt Fellowship
- CR Rao National Award for Young Statisticians
- Jan Tinbergen Award Indian Science Congress
- Young Scientists Award
- Research Areas: Linear Regression Models, Econometrics, Measurement Error Models, Missing Data Models, Panel Data Models.

DR.SHARMISHTHA MITRA

- Research Fellowship, Indian Statistical Institute
- National Board for Higher Mathematics (NBHM) Research Award
- Research Award, Centre for Scientific & Industrial Research (CSIR), Govt of India.
- Research Interest: Order Statistics, Econometrics, Application of AI Techniques

DR.SUBHRA SANKAR DHAR

- CSIR-UGC junior research fellowship (in Mathematical Science) in June and December, 2005.
- Post-doctoral fellowship (in Statistics) at the University of Cambridge, UK
- Visiting assistant professor in Statistics at the Michigan State University, USA
- Research interests: Multivariate quantiles and rank, Data depth, Measure of association and Isotonic regression

DR.SUBHAJIT DUTTA

- Post Doc KAUST Research
- Ph.D. ISI Kolkata
- Interest: Discriminant Analysis, Classification of Sequence Data.

DR.MINERVA MUKHOPADHYAY

- Postdoctoral Associate at Duke University, NC, USA, Jan, 2017- Nov, 2018.
- Ph.D. ISI Kolkata
- Research Interest: Asymptotic Statistics, Bayesian Variable Selection, Nonparametric Inference.

DR.DOOTIKA VATS

- Director's Award, awarded for outstanding service to the School of Statistics, 2016.
- Instructor at University of Minnesota.
- Research Interests- Monte Carlo, Markov chain Monte Carlo, Bayesian Computation, Bayesian Statistics.

BATCH HIGHLIGHTS

- The batch strength of the graduating batch of **2022 is 49**
- Students have secured internships in some of the top analytics companies in the country
- The students are fluent in software such as Excel, Tableau ,SPSS,MATLAB, MINITAB and programming languages such as R, Python, C, C++,SQL
- The students have undertaken compulsory course projects in Time Series and Regression Analysis as well as elective courses such as Markov chain Monte Carlo, Bayesian Model to bridge the gap between theoretical knowledge and practical situations.

STAMATICS

STAMATICS is the student club of the department of Mathematics and Statistics. The function of STAMATICS is to organize workshops to teach the applications of latest software, seminars on various aspects of Mathematics and Statistics, occasional subject oriented quiz competitions and departmental cultural evenings. The team of STAMATICS, comprising students from the department, work yearlong to organize seminars and workshops at regular intervals.

INDIAN ACADEMY FOR MATHEMATICAL MODELLING AND SIMULATION

It is a registered body headquartered at the Department of Mathematics and Statistics, IIT Kanpur. The academy aims to promote the application of mathematical modelling and simulation in all branches of knowledge. To achieve this objective, the academy organizes conferences, symposia, seminars and training programmes on a regular basis to facilitate dissemination of research conducted in the areas of mathematical modelling and simulation.

SCIENCE &TECHNOLOGY COUNCIL

The science and technology council brings various opportunities to do something practical and interesting during the summer break.

The project this year are – Intro to ML, by programming club, How can I explain this? & Why would I do it? By Brain and cognitive society

The projects are offered by different clubs, societies and council.

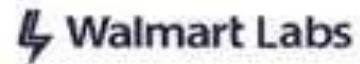This provides exciting opportunities to develop technical skills and explore interests.

PROJECTS
Under
MENTORSHIP PROGRAMMES

1)Science & technology Council
2)Alumni of Statistics Department

Alumni of Statistics Department

It is an initiative taken by the department students and alumni's of our department along with some professors this year .
In this a mentor guides group of 4-5 students on a rigorous project which helps in building skills and knowledge by working on real life problems.
In this way, students gets to learn from experienced seniors and get advice on preparing for their future.

PAST INTERNSHIPS

PAST RECRUITERS
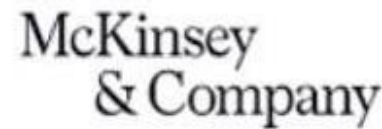
Contact Us

"From darkness lead me to light"

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