



INDIAN INSTITUTE OF TECHNOLOGY KANPUR

MSc in Statistics

Placement Brochure 2012



Introduction

Since the advent of this great institution, IIT Kanpur has a vision to provide the best quality education and act as a rostrum for scientific research, and a mission to develop human potential to its greatest degree, and in accordance with this mission, IIT Kanpur has maintained an exemplary share of contribution to this world. Recent years have witnessed the emergence of IITK as a top technological institute of India, and the Mathematics and Statistics department is the backbone that supports all branches of academics taught here. The students of IITK are a cherry-picked group. They have been chosen through a process that makes IITK one of the toughest institutes to get admission. The Joint Admission Test MSc (JAM) through which admissions are held for this course is a highly competitive all-India based entrance exam and only 4% of the aspirants are rewarded with a seat in the actual program. Students of the department hail mostly from the statistics background, along with a few who are mathematics graduates. Having dealt with preliminary concepts of several topics of statistics in their graduation level, they are now dealing with them in depth and learning how to implement them to the practical problems at hand. This program prepares them for a career in different sectors like finance, analytics, banking, insurance, risk management, R & D, etc.



Courses in BSc

Time Series Analysis
Parametric Inference
Design of Experiments
Descriptive Statistics
Demography

Multivariate Analysis
Non-Parametric Inference
Statistical Quality Control
Large Sample Theory
Numerical Methods

MSc 2yr Courses

1st Semester

- Sampling Techniques
- C Programming and Data Structures
- Matrix Theory and Linear Estimation
- Real and Complex Analysis
- Probability – I

2nd Semester

- Regression Analysis
- Applied Stochastic Processes
- Linear Programming and Extensions
- Statistical Inference – I
- Probability – II

3rd Semester

- Time Series Analysis
- Analysis of Variance
- Statistical Inference – II
- Departmental Elective – I
- Open Elective – I

4th Semester

- Statistical Simulations & Data Analysis
- Multivariate Analysis
- Non-parametric Inference
- Departmental Elective – II
- Open Elective – II



Projects

The students have undertaken various projects during the course of their study, which have helped them to bridge the gap between the theoretical knowledge they acquire in the classroom and the myriad practical difficulties faced in the real life which call for the use of statistical tools.

Some of the projects are:-

- A study of the psychological stress factor among IITK students
- A detailed study on the alcohol consumption pattern of residents of a certain hall in IITK
- Logistic regression analysis of death rates in cancer patients of Hiroshima-Nagasaki
- Time series analysis of BSE Sensex data
- Influence of various socio-economic and cultural factors and also the programmatic factors on infant death risks in India based on National Family Health Survey 3 data

Workshops

The students of this department have attended several workshops organised by various organisations like the **National Sample Survey Organisation (NSSO)**, etc.

Technical Skills

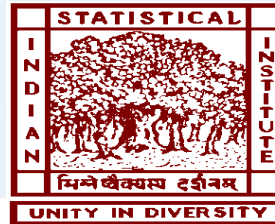
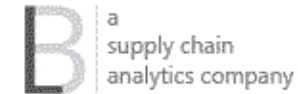
Students here are proficient in analytical software and programming languages like **R**, **Minitab**, **SPSS**, etc. apart from the usual **MS Office**, **C**, etc. They are now familiar with the basics of **Matlab** and **SAS**. They use these software as tools to solve numerical and practical problems in various fields of mathematics and statistics.

Internships

Many of the students have had the opportunity to intern with different private as well as government organisations like **RBI**, **MOSPI**, etc during the summer., where they have had much-needed exposure to the practical applications of the subject in myriad fields of work.

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Past Internships



Past Recruiters

CONTACTS

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