STATISTICS AND INFORMATICS MINOR

Nilabha Saha (Pursuing B.Tech. CSE)

SO WHAT'S THE MINOR ALL ABOUT?

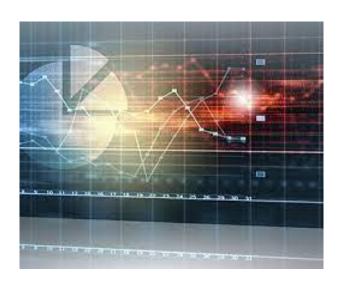
Statistical analysis, statistical inference, and probability models are indispensable for the study of the sciences, the development of technology, and a lot more!

Originally curated for M.Sc. ASI (Applied Statistics and Informatics) students at IITB, the minor was introduced to give a flavour of the same to B.Tech. students.

WHY DID I CHOOSE THIS MINOR?

- I chose the Statistics and Informatics minor primarily because I enjoyed probability and its applications, and thought that I'd get to explore the intimacy between statistics and probability much better with this minor.
- A strong background in probability and statistics would also help me in any machine learning applications I would take up in the future.
- I believed that a strong background in statistics would help me in any technical work I'd do.

COURSES OFFERED:

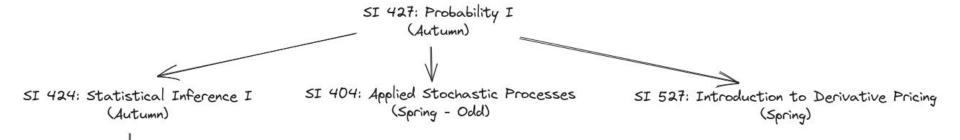


- **SI 427:** Probability I
- **SI 424:** Statistical Inference I
- **SI 422:** Regression Analysis
- ▶ **SI 404:** Applied Stochastic Processes
- SI 527: Introduction to Derivative Pricing

PRE-REQUISITES? NONE! (NOT TECHNICALLY, AT LEAST)

HOW MANY COURSES TO TAKE? ONLY 4!

DEPENDENCY GRAPH



SI 422: Regression Analysis (Spring - Even)

COURSES I COMPLETED

- **SI 427 (Probability I):** Covers basic probability theory with a very light touch of measure theory. This forms the foundation of all future SI courses.
- **SI 404 (Applied Stochastic Processes):** Covers Discrete Time Markov Chains and Poisson Processes. Despite its name, it doesn't really focus much on the "applications".

My TWO CENTS

- The course content could be understood and interpreted a lot better with some reading outside classroom. I'd highly recommend catching up with measure theory and real analysis alongside the courses.
- Do revise what happened in the past class before you go to the next class. There's a continuous progression and it would be hard to understand something if you're not comfortable with everything before it.

