JEE Admission Competition Analytics (2016–2021)

Data Analysis using Python (Pandas) & Power BI

Comprehensive Admission Data

64,958
Total Records
Admission entries analysed

14
Data Columns
Structured attributes

6
Years Covered
2016–2021 trends

Dataset Characteristics

Clean, multi-year admission cutoff data covering IIT and NIT institutes. Includes category, programme name, quota, and closing ranks—ideal for trend and competitiveness analysis.

Programme Competitiveness Spectrum

Most Competitive

Electrical Engineering with M.Tech in Communications and Signal Processing

Average Closing Rank: **≈354**

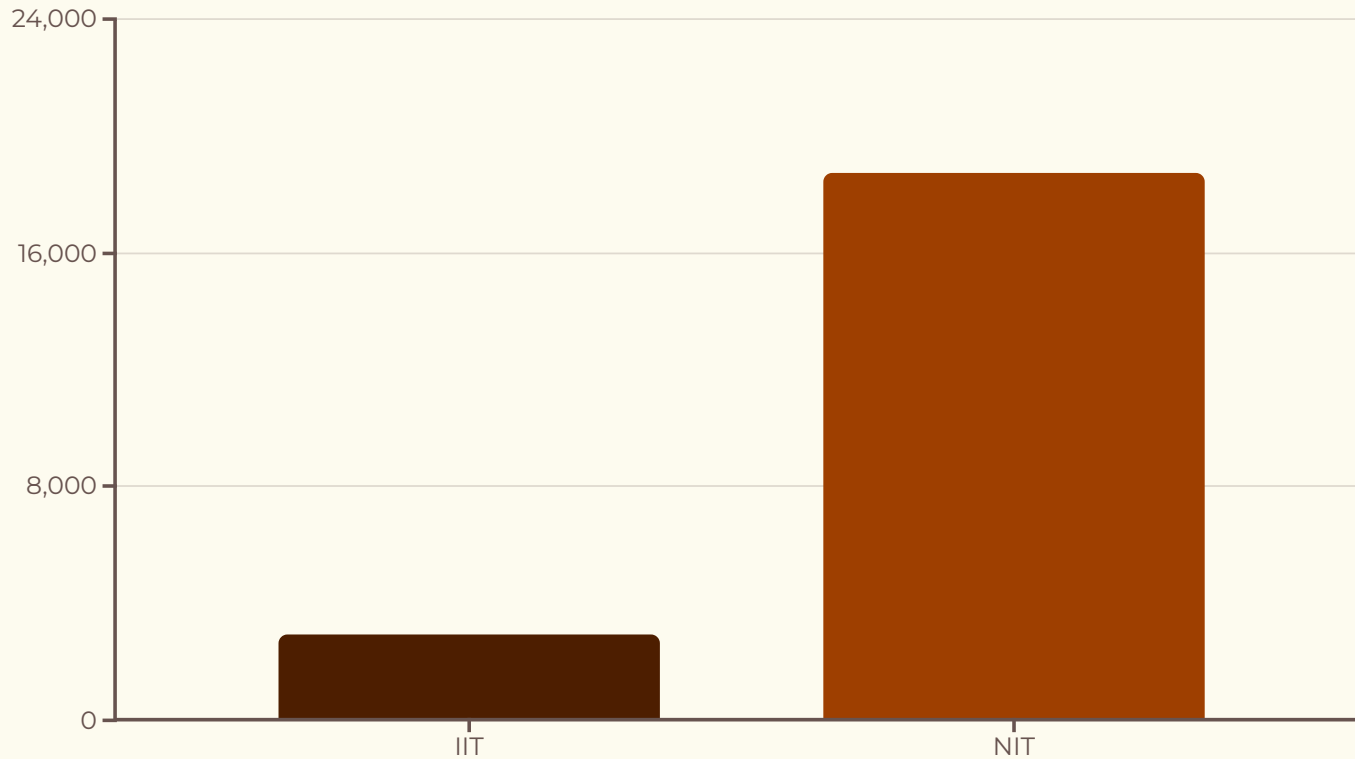Only top 400 ranks secure admission, indicating extremely high demand.

Least Competitive

Computational Mathematics

Average Closing Rank: **≈36,290**

Lower demand compared to core engineering branches.

IIT vs NIT Competition Analysis

Key Insight

IIT admissions are **significantly more competitive** than NITs, with average closing ranks nearly **6.5 times lower**.

This reflects the prestige and limited seats available at IIT institutions.

Category-wise Competition Dynamics

PWD Categories

Close at extremely low ranks (e.g., ST-PWD ≈28)

GEN Category

Closes at much higher ranks (≈32,037)

Restaurant Reservation Policy

Prepared by: Dean Dodger

Quota Impact

Reservation significantly influences cutoff dynamics

PWD categories show high competition due to limited seats, whilst reservation policies create distinct admission pathways.

Elite Admission Combinations

Top competitive category and programme pairings demonstrate the pinnacle of JEE competition.

1

OBC-NCL-PWD

Electrical Engineering (Microelectronics)

Rank ≈2

2

SC-PWD

Chemical Engineering

Rank ≈3

3

GEN-EWS

Architecture

Rank ≈6

Core technical branches dominate elite admission ranks across all categories.

Key Takeaways

Programme Hierarchy

Electrical and Communication programmes show highest competitiveness across all institutes.

Institutional Prestige

IIT admissions remain significantly more competitive than NIT counterparts.

Category Influence

Category and quota policies significantly affect admission trends and cutoff dynamics.

Specialisation Demand

Competition intensifies in integrated and specialised technical programmes.