

Making the Choice

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BEST OF THE LOT			
Seat Allocation For Top 100 Rankers			
Institute	2014	2013	2012
IIT-B	58	67	77
IIT-D	36	29	19
IIT-M	4	4	1
IIT-K	2	0	3

Chosen Courses Among Top 100		Top 10 Rankers' Choice
> Computer science 84	> Mechanical 1	9 opted for Computer Science at IIT-B
> Electrical 14	> Computer science (dual degree) 1	1 opted for Computer Science at IIT-D

Seats in 16 IITs and ISM-Dhanbad 9,784	Candidates who opted out 730
Candidates eligible for filling the choice sheet 18,061	Candidates allotted seats in 1st round 9,711

One of the most, if not THE most, difficult choice facing entrants to IIT's after passing their JEE is that of deciding which branch to choose. After the late nights and struggles to prepare and write the JEE, followed by the euphoria of getting selected, a typical 17-18 year old is normally in no shape to make a life changing decision with anything resembling clarity. Well-meaning advice pours in from all directions: parents, grandparents, family, friends, seniors, counselors, NRI cousins who have been IITians... the list goes on. The reasoning and logic of all their advice seems ironclad, whether it is about choosing the branch with the best career prospects, or the one which is most respectable, or the one which says "Listen to your brother/sister/cousin/friend with the great job in US, who knows why branch X is the best choice." Among all these voices, barely heard, is one voice from inside that raises a trembling hand and squeaks "Excuse me, what about me? I am your *interest!*" It is that voice which is most difficult to hear, understand and follow, and hence deserves some more attention.

The prevailing wisdom says that IIT's are the best for engineering, and since Computer science and Electrical engineering result in some of the most lucrative jobs, if you are a new entrant, the choice is pretty much made for you. Most of my peers followed this order in filling up their branch request sheets: Computer science, Electrical, Mechanical, Chemical, Metallurgy, Civil, Aerospace and if nothing is available, pick one of the rest and hope for a change of branch later on. This fact was so uniform that upon entering IIT Kanpur, I noticed that my peers were guessing each others' branches simply based on the ranks - "Oh your rank is 80?! You must be in CS. It is 750? So you took Mechanical, right?"- and so on. The biggest guiding factor throughout was: Will I get a good job with this degree?

Yet there are some things which pull the ground out from the prevailing wisdom. Firstly, the real result of an IIT education is not simply engineering skill, but *exposure*. That is the actual educational value of the institution. At the end of the 4-5 years of IIT's, one is aware of so many fields of human learning, and so many problems that require intelligent handling, that the view one had while choosing the branch seems miniscule in comparison. Freedom to choose projects under different professors, exposure to various skills through the different clubs, experience in event management, encounter of the culture of the whole of India through friends, development of arts and humanities – all these show us that calling IIT's simply

“Engineering institutions” is like calling Amritsar’s Golden Temple a “building”. The institutes have so much more to offer than what the new entrant and even the society *assumes* they offer, while making the choice. Prevailing wisdom is quite limited in this regard.

Secondly, all the resources of IIT’s are well suited to cultivate innovation and independent thinking. Access to talks, workshops, and events, computer and library facilities, as well as the numerous competitions allows every student to pursue a unique path. If innovation is what the institution offers, based on the hard work of the faculty and the money provided by the public of India, does it make sense to base the decision of choosing a branch on *joining the bandwagon*? It would be contradictory, and also quite hypocritical, to claim that one is attending IIT to become an innovator, when the very basis of choosing the course of study is mostly peer pressure. If at all one is to think and do things differently, it must start from the very foundation, by daring to make choices based on that small voice: *interest*.

It may be argued that an 18 year old has no clue where the interest lies. In reality, I have come across literally hundreds of instances where I have heard: “Oh, you took physics? I love physics, I would have taken it, but instead I took XYZ branch for ABC reasons.” Howsoever subtle the voice may be - being a healthy young human being means having some natural interests - and it is vital to listen to them when making this decision, and not to crush them under the excuse of getting a job. Sure, occasionally one makes a mistake, or loses interest later on in the subject initially chosen. But this mistake is correctable, and vastly better than the mistake of choosing only for social reasons and suffering from a lifelong disconnect with the subject. This disconnect prevents one from putting heart and soul into the subject, an absolute pre-requisite for any innovation or independent contribution to occur. Simply following the prevailing wisdom serves to be very costly in the long run.

I still remember it as if it were yesterday: the well-meaning counselor at IIT Chennai (where I had gone for the counseling and choice of branch) advised me why it was foolish to choose Physics after getting a rank within 500, when I could easily get Mechanical, or even Electrical, for that rank. Similar sentiments were echoed by my peers almost the whole of the first year at IIT Kanpur, in spite of the fact that a few top rankers had chosen Physics and other basic sciences in the previous years. Perhaps the number was too small to have any effect on the general trend. Yet, it was surprising to see the opportunities present in subjects like film-making, drama, music and entrepreneurship, and it appeared a real shame that the majority of the students could not utilize all of this to the full extent simply because the course demands of their initial subject did not allow them to explore these as well as they could have. Blindly choosing a subject is no guarantee that one actually learns it well. How many electrical engineers graduating today can fix their microwave ovens or house wiring? How many mechanical engineers can design a new type of vehicle from scratch? How many civil engineers understand the history of development of bridges and temples? Depth in any subject requires interest as a vital fuel, and without it one is trying to run a car without petrol.

This has been borne out in not only my own experience, but also by the experience of my peers in different nations. At the end of the day, to contribute to India or the world, the real choice to be made is not between computers or mechanical, physics or chemistry, but between ‘choosing by oneself’ and ‘letting the trends dictate the choice’. The real choice is: To choose or not to choose! And if the choice is made based on real interest, it makes a great foundation for education, and wherever that leads - India or abroad, towards or away from IIT’s – it is worth it.