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**General questions: Are we doing the right thing for our students? Do MIT students have any advantages over our competitors? What should our education do?**

From the couple of weeks I have been at MIT, I have found that there are many things I believe give MIT students an advantage over students in other colleges.

1. Students are challenged.

This is probably a gross understatement, but thanks to the filtering process MIT can set the bar higher, compared to other universities, as far as the challenge associated for schoolwork. Of course, it will always be the case that some will find the schoolwork more challenging than others, but overall the bar is set quite high. Even if not all students are able to excel at said challenges, the experience earned from attempting them is probably greater than that gained from, say, successfully completing basic challenges. The flipside is that sometimes some students might be unprepared for said challenges and would crash and burn, however, this isn't necessarily the case, which brings me to my second point.

2. There are tons of resources available to students.

Even if you happen to be having a hard time with classes, there are just TONS of resources made available to students to get help. Many classes offer recitation, office hours and tutoring, on top of that you can find past test, homeworks and lectures on OCW. There is also Seminar XL which is a seminar targeted at minorities which is basically a small group that meets a few times a week to go over material with a TA, which allows for a more one-on-one interaction than in recitation. There is also ESG and Concourse which are a great resource as they accommodate for the needs of students for different learning styles. If you need to find even more resources then MIT has S<sup>3</sup> which is a godsend. Overall, if you need help you can find help and people are more than happy to help you out if you ask. I don't

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know to what extent this is true in other universities, but at least in MIT I find the amount of help you can get to be at an excellent level.

On top of the help resources, there are plenty of other resources at an academic level, such as class equipment. Basically, there is plenty of cool, high end lab equipment you can play with to aid your learning, as well as various shops in case you need to build something, as well as a bunch of software made available to students at either low to no cost for them to use.

3. There are plenty of opportunities available.

On top of the large variety of academic opportunities given to students through the large variety of courses, there are many opportunities available as far as gaining practical experience in just about any subject of choice. UROPs are quite plentiful, as well other job opportunities, for example F/ASIP or UPOP for internships. As far as research goes, I believe MIT has far more opportunities available to students than in many other institutions. There are also a variety of clubs in diverse subjects in which you can get practical experience, even if not necessarily academically oriented.

4. The education is well rounded.

Students probably have a love-hate relationship with this point, but I personally find it to be good. At MIT students have to take courses not just in their major but in various other areas to fulfill GIRs. You actually have just about as many GIRs as you will end up having classes in your major. This ensures a well rounded education that will prepare students for a variety of challenges. People have about three to five careers in their life, and while it is certainly valuable to have technical knowledge in one specific field, it is good to have knowledge spread around various fields to ensure preparedness for other areas.

I also find the need for a PE requirement to be a sound one. It isn't so much at an academic education basis but rather a character development basis. Forcing students to exercise is a good thing. Those who

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complain about it are probably the ones who need it the most. For those who like sports, there are plenty of varsity/club sports at MIT in which students can take part in.

5. The educational style is quite unique.

At MIT, I find that education rather than just being focused on transferring knowledge, it focuses more on teaching students how to learn. This works alongside the variety of learning resources available to students. It is usually the case that you won't learn all you need to in class alone and will need to consult external resources, and it is up to you to see which resources are at your disposition and choose those which will work out the best for you. By the time you graduate, if someone handed you a syllabus and a book, I'm sure you would be able to figure out all you need to for a subject by yourself, one way or another.

6. There is a strong learning-oriented community.

A large part of what really makes MIT unique is its community. MIT does a great job in admissions by ensuring that particular characteristics are shared amongst students that will allow them to fit into the community. Not just intellectual characteristics, but also personality-wise. Not that all MIT students are similar by a long shot, but there are certain traits that allow them to "belong" to the community at MIT. This community promotes intellectual growth, cooperation and provides comfort in knowing that you can relate to your peers.

Frankly, I think MIT is doing a great job as far as education goes. I might be slightly biased by the fact that I don't really have a large basis for comparison. As a foreigner I find MIT to simply be eons ahead of any given university back home, and overall to just be far ahead from any other university I can think of.

But only time will tell, I guess. It's still too early for me to really make a properly informed evaluation of the education here. The honeymoon will be over at some point.

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**Specific questions: Where do you want your education to take you? What do you think it should give you? How do you think MIT will help you achieve these goals?**

**Where do you want your education to take you?**

After graduating, I hope to be able to find a job in the field of EECS, and with time move up to a management position. I can't think of any specifics regarding what in the field of EECS I want to do just yet, seeing as I haven't explored the field enough to have a specific idea.

**What do you think it should give you?**

1. Technical Knowledge

For one, I should have technical knowledge in my field. It should be in depth and complete, providing me all I need to know to work in the industry. As far as I know, MIT has a very strong program in EECS, which is excellent for me.

2. Practical Knowledge

On top of the technical knowledge, I should be able to know how to apply such knowledge. Not necessarily specific applications, but rather ways to think in order to apply the knowledge. This is to say that rather than learning how to build a motor, I should learn the principles behind the motor and what the thought process was behind its design, allowing me not to just replicate but rather to innovate.

On top of just knowing to apply concepts, there is a need to be able to communicate properly as well as being able to work in teams as in any career it will be necessary to communicate ideas and work in teams. From being able to present projects, create reports and direct teams amongst many others, these are abilities that need to be developed, which is something that needs a greater focus particularly in fields of engineering, where studies have shown communication skills are lacking.

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### 3. Learning Techniques

The technical knowledge I will gain during college will eventually be outdated, probably in less than a decade. Therefore, it is important for me to know how to learn by myself to stay up to date with the latest advances in my field. My education should teach me techniques to learn how to learn, and do so in an efficient manner.

#### **How do you think MIT will help you achieve these goals?**

1. A degree from MIT is quite likely to get my name in the door for interviews for job openings. MIT has a reputation, rightfully earned, which employers are aware of, which works to my advantage. Not only that, the networking opportunities available at MIT are great, seeing as there are many companies which actively seek to recruit MIT students, not to mention the many alums working in various companies which can help out fellow MIT students.
2. As far as technical knowledge goes, I am sure the classes at MIT are comprehensive enough to fulfill that need. In course 6, there are many general classes required for the field, and on top of that there are various specialized classes to take that ensure a depth of knowledge on top of the breadth of knowledge.
3. For practical knowledge, I find that even though there is a strong focus on technical knowledge, there is a good focus on how to apply it. There are labs as well as design assignments and whatnot which ensure that students have a good idea on how to think by themselves and apply the knowledge they have earned. On top of the academic requirements, there are always competitions, clubs and UROPs at MIT where one can put their knowledge to good use.
4. As far as learning techniques, there isn't really an option at MIT. Classes really do force you to develop efficient learning techniques, as there isn't really any other way around it.

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