

Engineering Vs Medicine

Studying medicine or engineering has been two of the most popular options for students since long time. Both of the fields have created excitement among students and attracted many students owing to the best career opportunity. In fact, both provide most wanted careers to students who opt for these. Students across the world find themselves at the crossroads after completing their high school. It is really confusing to decide from these two fields of science and choose one as a career. For toppers, the decision to opt between engineering and medicine is the most difficult task. However, there seems to be a bias towards engineering which is only natural and reflected in the numbers of doctors and engineers across the country. Though there are far more numbers of engineering college in our country and even worldwide as compared to number of medical schools.

Comparing both of the fields can be quite debating, but still there are facts associated with the both. Four years of engineering study can fetch a decent paying job as soon you graduate, whereas it is at least 8 years of hard work to study medicine and even then you could not hope to earn as much as an engineer. Normally a medical student requires 4 years of MBBS with one year of internship and a three year masters in a particular medical field. However, the nobility aspect of a medicine career attracts many students towards medicine and tends to attract a lot of female students. Being able to provide relief to people, curing their ailments and in some cases, saving their lives is a big enough incentive for some to be lured by this noble profession and satisfaction is something more than money can really get you. However, there are lots more differences between medicine and engineering that will be highlighted in this article.

Engineering

Engineering is the application of scientific, economic, social, and practical knowledge in order to design, build, and maintain structures, machines, devices, systems, materials and processes. Engineering is all about optimization that how effectively you can discover new things and cut down cost without compromising the quality. It may encompass using insights to conceive, model and scale an appropriate solution to a problem or objective. The discipline of engineering is extremely broad, and encompasses a range of more specialized fields of engineering, each with a more specific emphasis on particular areas of technology and types of application. Engineering requires a lot of practical thinking and a good IQ level. To opt for an engineering course, one need to have clear understanding of the fundamentals in practical and be enough sharp to make use of science in practical way utilizing his sharpness and creating something useful. To opt for engineering a student has two ways:

1. First one is to opt for non-medical with major subjects as physical, chemistry and math for his 11th standard after completing his tenth. After studying non-medical in 11th and 12th, student needs to appear for various entrance exams in order to secure his seat in an engineering college.
2. Second option is to opt for a diploma course in any engineering field after clearing class 10th and after completing their 3 year diploma, students can gain direct entry to second year of engineering through LEET exam.

Some major branches of engineering are:

- Mechanical engineering
- Civil engineering
- Chemical engineering
- Computer Science engineering
- Electronics and Communication engineering

Medicine

A doctor is a professional who practices medicine, and is concerned with promoting, maintaining or restoring human health through the study, diagnosis, and treatment of disease, injury, and other physical and mental impairments. Treating a patient with some common fever or an injured person are some basic roles of doctors which can get even complicated in the form of some complex surgeries related to heart, brain or whatever the problem be. There may be doctors who focus their practice on certain disease categories, types of patients, or methods of treatment – known as specialist medical practitioners – or assume responsibility for the provision of continuing and comprehensive medical care to individuals, families, and communities – known as general practitioners. Medical practice properly requires both a detailed knowledge of the academic disciplines (such as anatomy and physiology) underlying diseases and their treatment – the science of medicine – and also a decent competence in its applied practice – the art or craft of medicine.

The Medical Council of India (MCI) controls and monitors medical Education in India. New Colleges or Universities can grant MBBS, MS, MD or any Graduate or PG degree or diploma only if those colleges are strictly adhering to the standards set by the Medical Council of India. The MBBS course is of four and a half year's (54months) duration and is followed by one year of Compulsory Rotating Residential Internship. Getting admission into a medical school is not an easy thing, since number of medical seats in India is quite less. To get into a medical school the aspirant first need to opt for medical in his 11th standard with physics, chemistry and biology as major subjects. After 11th and 12th, candidate needs to go through various screening exams as a part of entrance test to secure a seat for MBBS course, which is a four and half year course with a compulsory 1 year rotational internship, wherein emphasis is laid on practical training.

Basic Differences:

Every year there are thousands of students who aspire to be doctors, but eventually end up study engineering as they think that crack the qualifying exam for entrance into med schools is quite difficult and also numbers of seats for medical students are quite limited. Then they set out to become engineers to prove that they can still do something. This choice is never entirely yours and is influenced by several other external factors that are quite important. These include your parents, the success of your elder siblings in a particular academic area, your teachers and, for some, even friends. Not to say that you should ignore them but the best bet is to listen to your inner-self and do some search on both these fields before deciding on one. Following are some considerations that are taken into mind while deciding between engineering and medicine:

Income:

It is believed that it is much easier for engineers to manage big salary packages as compared to doctors. Also it is a fact that though engineers manage a salary after 4 years of study, doctors still require nearly 8 years of study to get perfection and big pay scales. This is not something that is same in every case, pay packages of an engineer as well as doctor vary from person to person. Engineers can be found at many levels in the organization. You can see some of them running companies as CEOs and you may even see some engineers providing low paying technical support services. Hence, there is no certainty on income levels. On the other hand, people in medicine profession invariably earn decent income. Hence this all depends upon personal capability, though probability is quite high for engineers but even some surgeons with some great surgical experience do earn very high packages.

Ease of finding a job:

Job opportunity is something that students look out, before they enter into any professional course. Jobs in engineering sector are quite high but because of so much competition in engineering field, there is a shortage of jobs in comparison to the candidates. You won't come across many doctors or nurses who said they were unemployed. The reason can be attributed to the fact that there is less number of medical professionals than the required amount. If you are the one who wants to land up in a job immediately after completion of your course, medicine is the right specialty for you. There is

Challenges:

There can be several challenges associated with the medicine job. Though there are challenges in the other line also but medicine seems to be quite difficult. Many medicine students leave this field after first three months of study. The probable reasons can be allergy to smell in operation theater; unable dissect the frog; the sight of dead bodies haunts them and many more. If you can set aside all these issues and look at the larger picture of treating the ill, you can take up medical profession. Also there is a bigger challenge that there is no specific time for doctors, if you have a seriously ill patient, you don't have a choice to skip away. However in engineering field you are mostly associated to office work and have your specific working hours beyond which there is not such necessity for an engineer to stay there.

Leisure time:

While studying medical or even when you become a doctor, you tend to lose your social life and time for fun activities. Medicine is a branch that demands a lot. You cannot think of a picnic with your family if scheduled for an operation. Also they may be posted for emergency duties about which a physician can never complain. There is a lot of social responsibility also. If you are a kind of a person who prefers to work five days a week and wants to try lots of other things during the weekend, then you may opt for engineering. There are several doctors and nurses who say they have little time for themselves and they have to be ready to work during any time of the day and week. Since there is a lot of social responsibility associated with physician job, therefore there is no escape from your job