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Combining an Electrical Engineering Undergraduate Degree with an MBA Program

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Abstract

The relationship between an engineering undergrad degree and MBA as a master program would be an outstanding topic for the analyzing leadership process and see what kind of manager or leader an engineer would eventually become. Alternatively, what would be the relationship between electronic circuits, transistors, and the different pieces of knowledge in engineering with business and management? Although the way of thinking and technique of approaching the same issue could be entirely different between these two types of people, they will come across at the same node when they are thinking critically. We know there are a few different leadership styles that could have a disparate impact on fellow employees based on its characteristics.

Introduction

A high school graduate who starts an engineering program in a college will face some problems regarding the different atmosphere, different materials and will take quite a long time to become comfortable with all aspects of the engineering program. It has become widely recognized not only that the engineer of the 21st century needs leadership and management skills, but also that engineering graduates tend to be ill-prepared when it comes to the professions. However, after learning to how they can analyze and approach the course concepts then they could learn a specific mindset and then it will be much easier to work on the materials. Although it highly depends on the concentrations of the engineer, most engineering students follow the same path. For instance, electrical engineering is one of the problematic engineering programs which highly push the students to a particular path regarding solving problems, thinking in a different way than average life regarding reaching to the end of any issues with a specific answer. Students with this viewpoint could look at any problems just like black and white, which means a logic control process, or coding with zero/one only. Moreover, they will learn to analyze anything and think to figure out every detail of the environment to reach to its source. This approach is very far from the business mindset and its expectation.

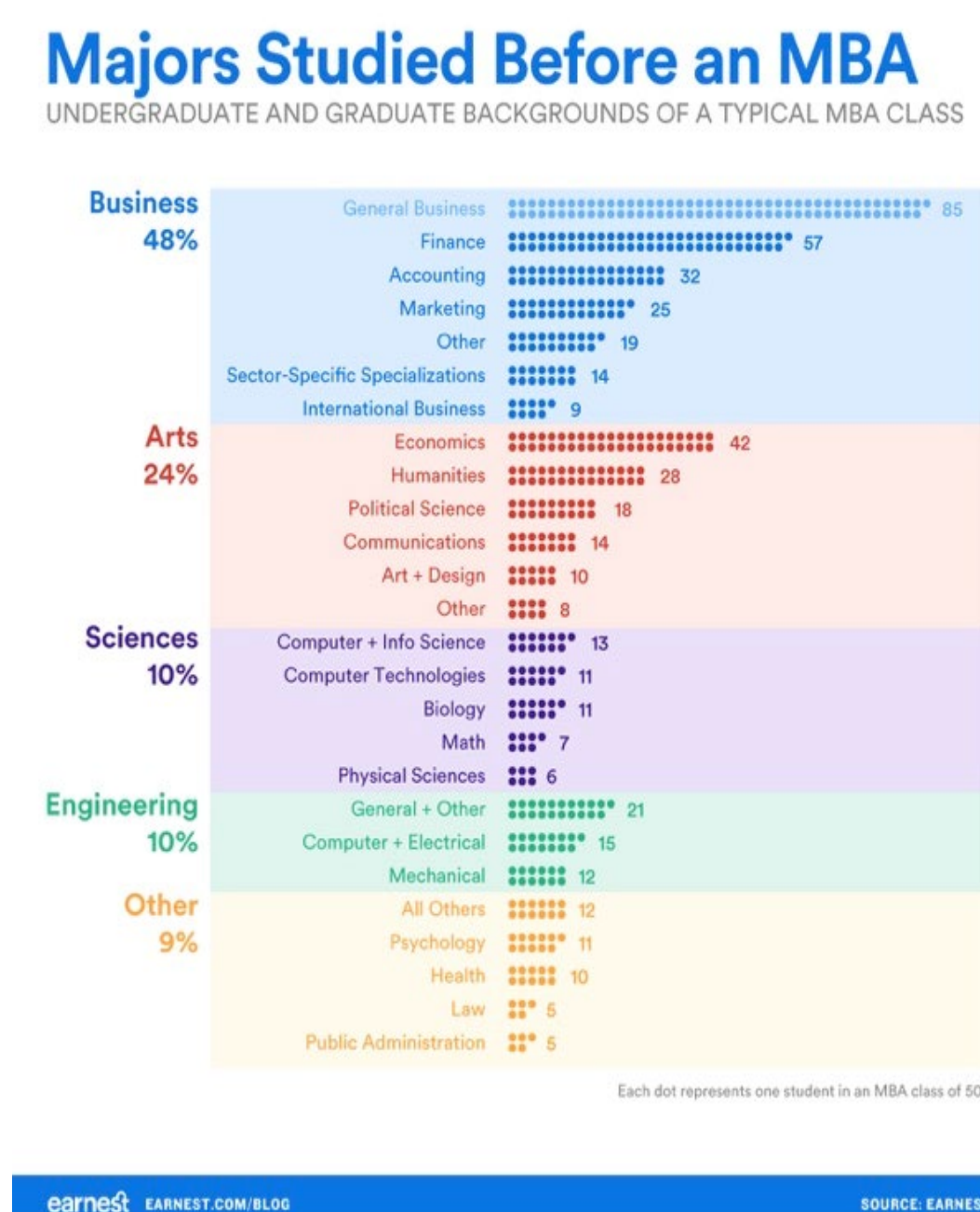
On the other hand, for MBA students just enough to realize how flexible they are when it comes to interacting with issues and trying to work on it. Although there is still much hope to switch and try to learn, and thankfully leadership development has become increasingly important in engineering education as companies are looking for engineering with leadership, communications, and teamwork skills. Nonetheless, it would work as long as students are in their program and work on their projects and other activities.

But in real life and more importantly in MBA program the story is entirely different. MBA students need to change their viewpoint and of course their mindset.

Combination of an EEE & MBA

As a electrical and electronics engineer (EEE), it is extremely valuable to have a solid background in Math and the Sciences because without them it would be hard to perform even the most basic of daily job tasks. Getting an MBA is much like learning to speak another language. The engineering background provides you with the uncanny ability to problem solve, and the MBA provides an innate understanding of the language of business...resulting in a winning combination. Therefore, for at least every 100 engineers, there is the need for the management type that can walk in both worlds and guide the business activities of an engineering-centric firm. These kind of companies will be quick to acknowledge this type of diverse skills.

Graduate degrees in engineering are directly applicable to your chosen job field while the MBA subject and study matter can seem a bit nebulous. Therefore, engineers must be mindful and carefully select the path to their advanced degree



Leadership Skills

A survey study by the American Society for Engineering Management identified leadership as the most significant gap of all the perceived differences in the value of the organization versus preparedness for the new BS engineering. It is similarly noted that many excellent engineers promoted to management become a poor manager. Above all other considerations, engineering research consultants consistently seek engineering managers with leadership skills. That survey study also concluded that technical abilities are a given; communication and leadership differentiate.

Nevertheless, such an undertaking cannot be accomplished merely by adding more subjects to an already full curriculum. To rise to this challenge, the engineering department of the University Rovira in Spain implemented a competency-based educational model. In this model, 4th-year engineering students who are enrolled in the Project Management Professional (PMP) program have the opportunity to develop their team leadership competencies by leading 1st-year Integrated Design Project (IDP) teams. This formal training is given after the 4th-year students have already experienced for themselves leader-directed and leader-centered teamwork in the 1st-year, shared leadership teamwork in the 2nd-year, and self-managed collaboration in the 3rd-year of their engineering studies. (Ozgen et al., 2013)

Conclusion

Overall, after the research is completed and the details of each major are determined, regarding their different mindsets, skills, and experiences of the various programs, this question becomes even more important than before: **Is Getting an MBA as an Electrical & Electronics Engineer Worth It?**

Well, the answer is: It depends! If a person wants to navigate his/her career onto a different path and perhaps totally change their career goals, **then the answer is YES!** Why? Because those who are expecting to get management, C-suite positions for large corporations or traditional employers then they have to have management skills and certification.

Alternatively, if those engineers who are in a specific position and their position (or anticipated position) requires MBA certification to get a management position, then they need to get through an MBA program. Finally, those who are looking to totally change their career away from engineering then an MBA is a great option.

On the other hand, if an engineer wants to remain a problem-solver and technical wizard, then the answer to the question above **may be NO!**

An engineer may want to continue on the same path they are currently on because there are exciting job opportunities in their engineering field and no need for switching to something else. Also, those engineers who are not willing to work in management positions and would like to stay in traditional firms may not feel they need an MBA.

The last word is about your passion and how you can find the most appropriate way between tons of different ways to feel better and more importantly feel satisfied.

I chose MBA, and I'm pleased about it!

References

Ozgen, S., Sanchez-Galofre, O., Alabart, J., Medir, M., & Giralt, F. (2013, March). *Leadership and Management in Engineering*, 13, 2, p. 65-75.

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