CEE-LGO Essays

We are interested in learning more about how you work, think, and act. In your response, especially to Question 1, please describe in detail what you thought, felt, said, and did. Many graduate programs will provide you with a prompt(s) to follow. Be sure to be thorough and complete with your answers.

Question 1

Tell us about a recent success you had: How did you accomplish this? Who else was involved? What hurdles did you encounter? What type of impact did this have? (500 words or fewer)

Hook: the statement begins with the challenge/hurdles related to their success, describing clearly the thought process and decisions for why this was a struggle

The last three years since I graduated from university were for me a whole struggle and challenge. I had decided to develop my career in a completely novel field, totally apart from what a civil engineer is supposed to do in my country, which is to work on construction work. I decided to work on complex structure design. It was not an easy decision. I had to face many prejudices and demonstrate that I was prepared enough to develop that kind of career. However, I did not hesitate at any moment to achieve that aim.

First, I worked in a consulting firm specializing in residential buildings, which was a field I was not interested in and I was not enough prepared. However, it was the unique way I found to start working in structural analysis and numerical simulations and employing computational tools. Definitely, a residential building is not a complex structure, but it is a structure all the same. There I had the chance to start working with software specialized in structural analysis and to start gaining some computational skills. It was not a cutting-edge project and I knew that I would not be working in that field all my life, but it was a bridge that would allow me to reach my main goal. This job enabled me to be involved in big projects, which required structural design of different types and analytical skills, and to gain practice in order to take the next step in my career.

At the same time, I continue studying and taking courses related to cutting-edge projects and fields being developed in my country. I assisted in as many presentations and conferences as I could, trying to get in contact with people related to companies and groups working on the type of projects I was interested in. It was at one of these conferences, organized at my undergrad university, that I met some old mates of mine who were working at a consulting firm specializing in Complex Structures Design. Showing to them my interest in being involved in that kind of project I got the chance to get an interview with the main manager of that firm. Two months later I joined their team, one the most specialized companies in structural analysis through computational tools, working on the most novel projects.

Currently, I am working on the structural analysis of a dome for a new museum made with a timber structure. Definitely, I achieve my goal. It had a huge impact on my career because it allowed make the change that I wanted to do. It was three
very hard years, investing a lot of effort without seeing results at the first time, but in the end, I accomplished my aim and this made me become much more confident about my capacities in order to undertake much bigger challenges.

**Question 2**

*Why do you wish to pursue the LGO program? What are the goals that you hope to accomplish both as a student and graduate of the program? Be sure to include a description of your post-LGO career plans.* (250 words or fewer)

Hook: for this prompt, the author does not immediately address the main question, rather they begin with their overall long term goals.

The main reason why I decided to make this change in my career was because I want to impact greatly my country. Latin American countries need to develop their economies by enlarging their regional economies and industries. We cannot continue being just an exporter of primary products, as we traditionally were if we want to become a developed country with an economy that enables people to have a wealthy lifestyle. Clearly, my country can become the leader of the region getting specialized in the most novel industrial fields. We can differentiate from the rest of the world as a highly specialized industry in cutting-edge projects.

The LGO program will provide me with the management skills that I will require to lead this goal for my country. We do not only need engineers highly specialized in technical knowledge and skills but also with management and organizing abilities to drive successfully challenging projects. I want to learn from real industrial projects from all over the world and acquire useful abilities to get prepared to lead with the challenges and difficulties that every manager of a big industrial project has to face. My career plan is to have a leading role in the development of the novel industrial field in my country, being in charge of cutting-edge projects.

**Optional Question**

*The Admissions Committee invites you to share additional information about yourself in any format. If you choose a multimedia format, please host the information on a website and provide us with the URL. (250 words or less, limited to one page).*

As part of the future generation of my country’s engineers, I’m concerned about the increasing demand for high-performance infrastructure and mechanical structures that developing countries have in order to advance important areas, such as energy and transportation.

These two areas are the most important struggles and challenges that my country has to face in the following decades. We need to invest a big amount of effort and money in improving our transportation system, including roads,
railroads, channels, and ports, to connect our regional economies with the world.

Moreover, if we want to develop our economy and industry, we need to secure enough supply of energy for all the manufacturing processes. For that aim, we have to generate a diversified energy matrix, taking advantage of all available energy resources: wind, solar, hydraulic, nuclear energy, and conventional resources.

Consequently, we need to plan a long-term group of coordinated policies and infrastructural projects in order to make our country prepared to take advantage of all its potential and become a regional leader. I am completely committed to this aim, and during my stay at MIT, I would like to gain both the technical and management skills needed to lead this process and to be able to impact greatly my country.

The author ends by relating his goals to how this graduate program will help him succeed, tying everything back to why they are applying to the graduate program in the first place.