Science is about knowing; engineering is about doing; this is what drove me to pursue an engineering degree. By the age of 16, I previously worked on a successful, profitable online project as an intern. Through self-motivation and perseverance, I have earned a genuine, unique insight, which has allowed me to network with diverse people from different ethnicities. Frequent social interactions taught me how a project plan is written and run and helped me develop skills to check the economic feasibility of the final report. This has sparked my curiosity to learn more about the work behind the infrastructure. My father, who was the Chief Engineer of the Road Transport and Highways Division (RTHD) of Bangladesh, took me to India, Singapore, the USA, Dubai, and Thailand with him on his international trips and trainings, which were the most interesting, yet exhausting experiences of my life which installed in me a resolute desire to study in the about Transportation and Structural Engineering. Here, I was inspired by the altruistic concern of an engineer who offered reduced rates for those in financial difficulty, keeping their structural model intact. In 2019 I went to Seattle and was impressed by the Alaskan Way Viaduct replacement tunnel construction to minimize Traffic congestion. Throughout the trips, I have empathized with various firms, developing my understanding of the importance of holistic care and multidisciplinary teams for a successful mega project.

After finishing my Higher Secondary Exam with distinction, I got a chance to study civil engineering after giving a competitive entrance exam in BUP. During this 4-year-period, I realized the specialized civil engineering subjects, including Structural Analysis, Soil Mechanics, Environmental Engineering, and Transportation Design, took my attention. I chose Transportation Engineering as my primary subject and as my undergrad research topic related to this field as it helped me to gather more knowledge about aggregate modeling, discrete modeling, assignment modeling, calibration and validation of any model, economic appraisal of project by HDM-4, drainage design by Autocad which helped me to work alongside with top consulting firms including SMEC International, Wahid Construction LTD, Hifab International AB. Working as a junior engineer, I gained 3.5 years of wholesome experiences, including Traffic engineering experience: trip generation, traffic projections, traffic operations analysis, data collection and operational analysis, reviewing VISSIM microsimulation models and technical reports, with Python anticipating traffic patterns in Highway designing, soil simulation and modeling in Geotechnical engineering as well. Having been introduced to Urban Transport Planning and Management, I supplemented my studies with further reading. I read a 'Shared Space' article on how Monderman's designs emphasized human interaction over mechanical traffic devices; by taking away conventional regulatory traffic controls, he proved that human interaction and caution would naturally yield a safer, more pleasant environment for motorists, pedestrians, and cyclists. I strive to have similar evaluation traits and design skills, and one day, I will be as successful as he is. Studying other engineers has stimulated my determination to create value and worth. You-Lin Xu's "Smart Civil Structures" was an eye-opening read. I was intrigued by how civil engineers use gentle nudges to capitalize on humane activities; in the first chapter of this book, the author uses the process of the fundamentals to the state-of-the-art. I found the ideas intriguing in two ways: first, how it integrates intelligent materials, sensors, actuators, signal processors, communication networks, power sources, diagonal strategies, control strategies, repair strategies, and life-cycle management strategies; second, from an objective point of view, it is fascinating how it would function optimally and safely in its environment and maintain structural integrity during strong winds, severe earthquakes, and other extreme events. Outside my academic and professional life, music, reading, and yoga help me relax and balance my preparation. I like to retain and revise my previous studies by tutoring my juniors. In addition, I have served my school drama club and community service club in my pastoral role as a school prefect, allowing me to develop my prioritization skills. I also branched out into a small quantity of hardware and circuit design when I and some friends made an automated gardening system for Science Fair that got the first prize in 2009. Finally, participating in our school's debate program has helped me hone my research and conflict-resolution skills.

Globalization has reached an intense form today; economics are so tightly connected that one action leads to numerous others; the role of mega infrastructure projects is expected to be fundamental in the overall national development process as they contribute positively to employment generation, connectivity, regional trade, economic integration as well as energy security of the country. After finishing my master's degree in civil or transportation engineering, I would like to work for my country Bangladesh. It is expected that the large infrastructural undertakings and mega projects, including the Dhaka Metrorail Project, Dhaka Elevated Expressway, Circular Road around Dhaka City, Construction of an International Airport in the center of Bangladesh, Dhaka Underground Train/ Tube Rail, would transform the country's communications, transportation, ports, and energy scenario by 2030 and help the country to achieve high mid-income country status by 2041. I want to create a legacy that will inspire other young women into a similar growth mindset that I hope to experience, as innovation must continue to lead to value creation. I have the determination, tenacity, and ability to study at a higher level.

I looked in several countries such as the USA, UK, Canada, and more. UK universities lLoffer excellent graduate education, and that fact did not leave the question of where I wanted to pursue my graduate education unanswered. Research experience also plays a large part in achieving a well-rounded education, and the opportunities are open for students to gain research experience in UK while still finishing their studies, allowing them to gain not only academic knowledge but also show an insight into where the industry might be heading in the future. This, coupled with cooperative education opportunities, makes graduates successfully ready for the challenges that await them in their work lives. The University of Leeds is well-celebrated when it comes to educational excellence. They place importance on research and interactive work and are one the best-ranked universities inside Uk; coupled with this, they also offer good cooperative education opportunities. All these positives can also be said for other top-tier Uk universities. However, the main factor that differentiates University Of Leeds from other institutions is the location of its campus, situated in the heart of Leeds. A dynamic center for business, industry, and cultural diversity, where the town is friendly and accessible enough to the world and the University aspires to take a lead role in contributing to the development of liveable, sustainable, healthy, and prosperous city regions, including Intelligent Transportation Systems; This seals the deal for a transport engineer such as me. In addition, I have always liked extracurricular activities. Although academics alone do not make a person competent and effective, I am confident that the various clubs that University of Leeds offers will be impactful for me in developing my skillsets in these two areas of interest for me. It is not that our country does not have a good education; we have some institutions which are good enough. But one thing we lack and desperately need is cooperative education and internships for our graduates. This absence of proper work experience harms the ability to function in a professional work environment. Bangladesh has covered much ground regarding technological development in a short period. Unfortunately, I would not get to receive the quality of education studying in Bangladesh that I would get from an institution like the University of Leeds. I will also be left out from learning and interacting with international students and cultural and ethnic groups from all over the world like I would in a multicultural city like Leeds. I know that education from a reputed university such as University of leeds will be a significant leg up for my profile, and with the added research and work experience; I stand to gain from cooperative education programs, which will make me a skilled graduate as well as make me stand out from the crowd. Considering my experience in transportation, my work alongside research in the field, and science-related and leadership extracurricular activities, I am an ideal candidate for this prestigious program. I look forward to starting a fruitful career in the Civil Engineering program at University Of Leeds.