

Statement of Purpose

My decision to pursue Postgraduate study is inspired by the desire to combine my creativity with specialized knowledge to invent and enhance technology for this ever changing world. I have chosen Electrical Power Systems Engineering as the field of my Masters studies wherein I am determined to obtain a leadership position in research and innovation. I am confident that Postgraduate study at the School of Electrical and Electronic Engineering at University of Manchester will serve as a bridge between the potential and this career goal of mine.

I always like to delve deeper into the subjects that interest me. This passion, along with my hardworking ability, has not only placed me in the top 20% of undergraduate class but also enabled me to gain detail knowledge of subjects related to Electrical Power System. For example, when I was introduced to Transmission and Distribution of Electrical Power in my freshman year, I tried to find out how power, after being generated, transmitted and distributed to a long distance through thousands meters of bare conductors. As a result, I kept discovering more on this field through the Power System Analysis, Switchgear and Protection, Power Stations, Renewable Energy Conversion courses in the subsequent semesters. By the same token, at my final academic year, I undertook a thesis on **“Prospect of Micro-Hydro for Sustainable Development of Bangladesh”**. This thesis work made me to go through a lot of field works and laboratory works such as site selection, stream flow and head measurement, controlling of Micro-Hydro. The ultimate reward came when this thesis work was approved at a national and an international conference.

The professional experiences that I have gained are quite diversified. My first job was at a heavy industry equipped with modern machineries, where I learned a lot about motors, generators, transformers, inverters and many more. However, I switched my job to Southern University Bangladesh as a Lecturer where I got a chance to supervise an undergraduate project on **“A Viability Study for Mini-Hydro Power generation from Shahasradhara Waterfall, Sitakunda, Bangladesh”**. The other notable undergraduate projects which were supervised by me in recent years are Controlling of DC motor drive using RF technology (micro-controller based), Controlling and Monitoring of Power transformer using GSM technology (microcontroller based) and Solar Battery Charge-Controller using micro-controller technology. All these academic and professional experiences encouraged me to enroll into the Postgraduate program.

Having maintained the high quality research work with industrial relevance at School of Electrical and Electronic Engineering, University of Manchester is always been the targeted institution for many of the young and enthusiastic learners and I am one of them. After coming back to my country, on learning various advanced topics of power system on smart grid technologies, high voltage engineering, I will put my knowledge to the betterment of socio-economic condition of my country through making stabilization between the cost of energy and its environmental impact.

Ten years from now, I envisage myself as an academician, researcher and educator demonstrating strong leadership role in research and innovation. For this I need adequate academic preparation beyond my undergraduate study. I will consider my mission of life

accomplished if the knowledge gained from this great institution can have meaningful impact on people's lives.