

STATEMENT OF PURPOSE FOR MASTERS IN M.E **(INDUSTRIAL SYSTEMS ENGINEERING)**

In this contemporary Industrial sector, being dispatch on production without compromising the quality of product or service is imperative for any organization to thrive. Here, the versatile application of Industrial Engineering principles in different departments of a company resolves complexity and boosts productivity, as this technical field consolidates engineering methods with business management acumen. I realized the vast scope of this protean discipline. Therefore, after contemplating my career goals, I decided to pursue a master's program in the intended course at your university.

During my high school education, I was amazed by the principles and real-time application of physics on types of machinery and environment, as a consequence, this insatiable curiosity for science became the impetus for me to choose Mechanical Engineering as my undergraduate course. In those 4 years of this exhaustive program, learning has furnished my skill set professionally in the realm of Designing, Manufacturing and Force Analysis. However, having developed a specific interest in subjects like Operations Research, Production management, and Industrial Engineering & Management funneled down my focus and persuaded me to opt for Industrial System Engineering.

As part of my undergraduate curriculum, I have done a major project “FABRICATION OF SEMI-AUTOMATIC ARC WELDING MACHINE WITH VARIABLE WELDING SPEED” in a team of 3. This project was challenging as we got no funding to prepare this project. So, we decided to build the structure by using a discarded metal frame of a bench, from our college backyard. We mounted motors, speed regulators, chain drive mechanism and electrode holder on the frame, we aimed to determine an optimum speed with which the electrode has to be displaced which would produce the desired product and test the welded product on a UTM under various load condition. As hard work paid-off, our project was among the top 5 submitted in the department and received an outstanding A+ grade.

My first and one of the most insightful 2 weeks exposure to actual manufacturing process happened during my industrial training at the PLANT, there I learned about the indispensable role of Quality Control and optimization on various department involved in steel manufacturing to produce unparalleled products, which crowned this company among Asia’s largest steel manufacturer. This rendezvous compelled me to delve more thoroughly into other sub domains of Industrial engineering. As a consequence, currently, I am an intern at FOUNDATION, who is the world’s biggest centralized kitchens and NGOs. Here, I'm gaining hands-on experience on how concepts of continuous improvement processes such as Lean Manufacturing, PDCA, ROOT CAUSE ANALYSIS, KAIZEN, and SIX SIGMA are implemented in food production. Moreover, I'm working on an ongoing project on cost optimization of meals produced by harnessing the skills I’m acquiring.

Alongside, I have published my research work titled “ECONOMIZING OF MATERIAL SHREDDING ALLOWANCE OF MILD STEEL SPECIMEN BY EMPLOYING TAGUCHI METHOD”, in which I optimized machining process by setting up different parameters and

identified the constraints that improved the machining of a mild steel specimen. Furthermore, to bolster my multidisciplinary skills, I took some certification courses pertinent to engineering design namely AutoCAD, Creo parametric 2.0, CNC Fanuc (for lathe operations). Likewise, to orient my skills towards my potential graduate program, I was enrolled in some MOOCs to explore additional resources beyond classroom walls, one of them titled “OPERATIONS MANAGEMENT” was a 12-week course followed by a certification exam endorsed by the NPTEL, I completed this course with a score of 75%.

Besides my academics, to render my gratitude for cardinal virtues I possess today and because of my innate compassion for society, I volunteered in the SCHEME during my undergraduate, there I spent 1 week in a nearby village to my hometown, taught children and their parents regarding significance of education, hygiene, ethical values and perils of drug abuse to cultivate a civilized community. On top of that, I have been volunteering at MOVEMENT since last year, with an effort to conserve nature, we conducted tree plantation drives.

I believe, without practical application of obtained knowledge, progress is inevitable. So, my immediate goal after my graduation is to return to my homeland and execute the professional skills I amassed at a manufacturing firm especially as an operation research analyst, ultimately gaining experience in the planned sector. In the long run, I can conceive myself escalating the production standards of the company I’m working for. The global exposure, diversity in the university and safety convinced my mind to study in Canada. Moreover, the amiability of natives towards international students further made my decision concrete.

At X, I’m intrigued by its specialization area in manufacturing, process engineering and Modeling and simulation of industrial system also, the university’s distinguished industry-tailored curriculum and highly qualified faculties in the Industrial System Engineering department, who have firm experience in research. At Uregina, I am especially looking forward to work under Dr. P(P.T.) because my aforementioned research work is aligned to his research interest i.e. optimization of industrial processes. I believe, with his guidance I would meet my career goals. The intended master’s program will undeniably provide me the desired skills, knowledge and excellence I seek. These remarkable facts persuaded me to choose Uregina for my higher education. I hope you will consider my application positively and help me to culminate in my career.