

STATEMENT OF PURPOSE

As a Mechanical Engineering undergraduate student with an ardent interest in the industrial work environment, I have learnt the principles of mechanical engineering those are applicable to most machines, tools and processes which naturally widens my scope of learning and research. This has intrigued me to explore the option of pursuing master's course in Mechanical Engineering from your prestigious University, which I believe will not only supplement my knowledge that I have acquired but also provide me with the best possible platform for the attainment of my future goals. I draw my inspiration towards this field from my mechanical engineer father who serves as a Mechanical Supervisor in a government run organization, National Fertilizers Limited. He was the one who introduced me to machines like Lathe Machine, Gear Cutting Machine, Hydraulic Cutting Machine, Steam Turbines, Compressors etc. and plants like Steam Generation Plant, Ammonia Plant at a very impressionable age. This naturally triggered in me a desire to know more about what happens inside these machines and the reason behind their precise and accurate working. Also, my frequent visits to the industry enabled me to retain as well as enhance my keen interest in the field and thus, influenced me to pursue my undergraduate course in Mechanical Engineering.

Due to my innate interest in the field of Mechanical Engineering and impressive performance in the engineering entrance examination, I secured a seat in this discipline of engineering at the XXXXXXXXXXXX Technical University in XXXXX. My undergraduate major has given me a wide exposure to numerous subjects like Thermodynamics, Refrigeration and Air Conditioning, Heat and Mass Transfer, Mechanics, Mechanical Vibrations etc. My under graduation has been a rewarding experience as I got numerous chances to visit industries to gain a close look at the application of mechanics and its related theories. I possess immense quest for knowledge which enabled me to score more than 90% marks in practical labs of all above-mentioned courses. In addition to this, with the increasing role of computers in every field of engineering, I underwent career enhancing certifications like AutoCAD and pro-e which helped me to learn various design aspects.

Owing to my interest in the concepts pertaining to Refrigeration & Air-Conditioning, Thermal & Fluid Sciences, Heat & Mass Transfer, I submitted a project in final year based on Regenerative Braking System for an Electric Bicycle, which works on principle of conservation of energy i.e. converting the heat lost on applying brakes into electrical energy, which was well received and appreciated by department professors and H.O.D as well. The concept for this project is to demonstrate a regenerative braking system on an electric bicycle. The ultimate goal is to use the energy regained from the RBS as an acceleration "boost" on the bicycle. Although the final goal of repurposing the stored energy into an acceleration boost was not achieved, a fully functional electric bicycle with regenerative braking was built. The regenerated power was even stored in a capacitor, so finding an appropriate use for that electricity should not be difficult.

In the years 20XX and 20XX, I gained immense exposure to the industry on the basis of my internships, which I undertook as a part of my syllabus. Here, I got the opportunity to work in the Manufacturing and Maintenance Department at India's leading fertilizer supplier National Fertilizers Limited. During this internship, my immense effort in increasing the efficiency of



boilers and steam turbines under the guidance of the Chief Engineer of the Department was highly appreciated by the Department personnel. The most important thing I learnt during the internship was that Steam Turbines are one of the main energy consuming equipment, even though not much attention is paid to them. Trimming of operating parameters such as Steam Inlet Pressure and Steam Inlet Pressure are essential for efficient operation of steam turbines. Huge benefits can be reaped by optimizing operating parameters, by minor modifications and even by replacing old inefficient turbines.

At this juncture of my career, I feel that my educational and professional qualification coupled with the opportunities arising out with tremendous industrialization have reinforced my goals and have developed a keen desire in me to pursue my master's course in Mechanical Engineering from your University, which would definitely equip me with comprehensive and specialized skills as an outcome of rigorous trainings in all aspects of Mechanical Engineering.

Browsing through the information given on the website of University XXX, I am highly impressed with the accomplished faculty members, environment and the facilities the University has to offer to its students. I also realize that the syllabus offered at this University is designed to meet the demands of the present day industry covering Manufacturing, Production and R&D & Maintenance aspects amongst others. There are as many as 25 research labs and 18 teaching labs in the Department of Mechanical Engineering and the University is ranked amongst the top in Canada and in top 450 among world universities which indicate its high standard. Given these facts, I believe that there cannot be a better platform than this University to obtain advanced knowledge of the mechanical field. I have come to a conclusion that the Master in Engineering program offered by Department of Mechanical Engineering at XXX University is excellently structured to match my requirements. I believe studying in your university with high-tech facilities; excellent faculty and the highly suitable environment are of utmost necessity to achieve new heights in life.

I am fully aware of the fact that pursuing this course requires a high level of intelligence, dedication and immense sacrifice. I am confident that I have the capability to contribute positively towards your esteemed University and with great hope; I eagerly wait for your benevolent act of accepting me into your fold and granting me an admission in my desired course.

Sincerely,

XXXXXXXX