In a world of rapidly changing times and technological marvels, I choose to major in Mechanical Engineering as it is without a doubt the broadest based, generic and fundamental of all engineering disciplines. I am blessed with the inherent basic trait for mechanical engineering which was apparent very early in my life and this is authenticated by my strong inclination towards mechanical components and my undying curiosity to figure out how machines work. We own a thriving business wherein we market and service engineering goods to clients mainly from Germany and Korea. My father, who started this business is living proof that vision, perseverance and focus is all it takes to make dreams into a reality. To be like him one day, I aspire to avail of a Master's degree in Engineering at the University of _____.

In school, my favorite subjects were physics, chemistry and mathematics. I received the Vidhya Bhushan, an honor awarded for academic excellence in Grade 12. I then did my Bachelors' Degree in Mechanical Engineering from the _____university, _____ passing out with distinction. A serious student, the theoretical knowledge I gained during my undergraduate degree was immense. I am now eager to design new machines and feel that a Master's degree in Mechanical Engineering will garner me with deeper concepts and practical knowledge to do so.

During my Bachelor's degree I have completed two major projects. My _____year project was "Analysis of vibrations in Pumps accessories". This was an industrial defined project where I analyzed the different reasons for the vibrations caused in pumps and their accessories at Jyoti Ltd, a leading company in design and manufacturing of pumps. The duration of the project was six months and I worked considering the factors of Misalignment, Mass Unbalance and Improper Foundation with the available machines of the company.

The second project which I did in my _____year was an industrial defined project on the Reduction of porosity in alloy steel casting. This was also a six month project which I undertook at Shree Vallabh Castings, Vidhyanagar. The company faced huge problems of high rejection rate of the castings they produced. I drew on my problem solving skills and eventually found out the root cause of this problem. During this project, the problems I encountered were in the temperature of molten metal and curing time, which had been changed. Also the number of holes for ventilation was more than required and the resin (binders) ratio to sand was altered. My patience and ability for long hours of hard work galvanized me to search for solution. I altered the amount of clay the sand and finally used Wash sand, which turned out to be a success. I found the porosity gradually decreasing and the rejection rate went down drastically. The company was ecstatic that I had found a solution to their problem.

The scope of mechanical engineering is currently expanding beyond traditional boundaries and the conventional role can be seen giving a boost to Robotics. Today, robotics is a rapidly growing field. Robotics is gaining popularity not only in domestic and commercial spheres, but is also engineered to do dangerous jobs like defusing bombs, mines and even exploring shipwrecks. My inventive spirit, an essential ingredient of a successful mechanical engineer, came to the fore when I designed and constructed a robot car, complete chasis and all. A friend helped with the electronics part with important contributions from me. This robotic car turned out to be the highlight of my student life especially when it proved a winner at various races and events at intercollegiate competitions with me as the operator.

Aware that training would heighten my awareness in my core subject, I took a vocational training at Paarth Valves Pvt Ltd Vadodara for two months in 2010. I contributed to the company by recommending the use the stainless steel material instead of the conventional brass material for valves because of the suitability of this material for chemical services, its long life and cost efficiency. In fact when the company produced a prototype valve, the initial cost of manufacturing of valves of brass and stainless steel was at par. However when two more batches were produced, the company profited by 7 – 8% with the manufacture of the stainless steel valves. I did a second vocational training at M's Baroda Hi-Tech Alloys Pvt Ltd for two months in 2011. I addressed the problem of a junction hot tear in mild steel casting by suggesting the placement of an extra feeder at the junction to the production department. I was appreciated for rightly identifying the problem and for providing a suitable solution to the problem.

Juggling academics and other activities come easily to me. I indulge in sports, numismatics, driving and cooking. I am a national level Tennis player, and have been the captain of my college Tennis team for three years. My leadership has made us the champion team twice in inter-collegiate tennis competitions. I enjoy the game of football and have been part of the college football team. I keep myself informed of the latest technology throughout the world by reading tech magazines and watching the latest developments on TV programs.

My focus now is to acquire a Masters Degree in Mechanical engineering at the University of _____, in the US. The comprehensive programs, the distinguished faculty, the state-of-the art infrastructure, the hands-on practical experience offered by your esteemed university lure me to avail of your graduate program this spring 2014. As a well informed, confident and enterprising student my ardent desire is to contribute to the development of various engines, power plant equipment, heating and cooling systems, to design and develop new machines and mechanical systems and most of all to return to India and modernize my father's business beyond his wildest imagination.