Key Academic Achievements:

- Qualified for a **branch change** option (Metallurgy Dual degree to Metallurgy BTech) applicable only to the **30** students out of **880** in the institute.
- Currently ranked **3rd** among **114** students of the 3rd year batch of department MEMS.
- Recipient of **Institute Academic Prize** (2011-12), awarded to only **29** third year students out of **880**.
- Was ranked **2295 among half a million** students who appeared for **IIT-JEE 2010**, which is in top **17**% of students who qualified this examination.
- Was in the **4**th position in Ahmedabad city, securing **93.69**% in **Matriculation** 2008 from **GSEB**.
- Was among the **31** students out of approximately **1 lakh** students in matriculation in whole **Gujarat State** who scored **100**% marks in both Maths and Science.

Additional Learning:

- Pursuing **Minor Degree** Courses in **Mechanical Engineering**.
- **Courses studied**: Thermodynamics, Fluid mechanics, Manufacturing Process.

Internships and Projects:

1. <u>ONGC Ahmedabad, Industrial training</u>. [December 2011]

- Completed a month long training at **ONGC Ahmedabad Assest** on "**SRP(Sucker rod pump) Automation and Dynacard** ".
- Learned the basic industrial working of an **oil firm** starting from the extraction of Oil and Gas, machinery and plants used for it, basic refining of oil ,distribution of oil and gas for different purposes, various aspects that affect the production etc.
- Made a project on "SRP automation and Dynacard" which was involving how to study from surface the condition of well and production of oil from subsurface using the graph as a **Surface Team** member.

2. <u>Super Capacitor</u>. [June-July 2012]

Guide: Prof. R.O.Dusane, **HOD** of the MEMS department.

- Devised a functional Super Capacitor in the laboratory and optimized its level of capacitance for the given resources.
- Understood the working of **Super Capacitor** and the different types of electrolytes, electrodes and separators used for making of a Super Capacitor.
- Studied deeply the dependence of capacitance on the **concentration of the electrolyte** used, using the method of **Cyclic Voltammetry**.

3. **Metal Sheet Forming** [Jan-April 2012]

Guide: Prof. **K. Narasimhan**, MEMS department.

- Studied the basic functioning of how deformation in metal sheets occurs via different processes like **hydro firming, bending and stamping**.
- Looked into the digital simulation of deformation with the help of the software **PAMP-Stamp** and studied the basics of the software.
- Analyzed practical experiments on bending and stamping in the laboratory and studied the behavior of Material deformation.

Academic Projects:

1. **Ferro- Fluids.** [March 2011]

   Guide: Prof. Ajay Panwar , MEMS department

- Successfully carried out the task of making **Ferro-Fluids** , which doesn't follow **Newtonian Laws** and also have strong **magnetic properties.**
- **Ferro-fluids** are colloidal particles made of **nano scale ferromagnetic particles** suspended in organic solvent or water.

2. **Virtual Stock Market.** **[**March 2011]

   Guide: Prof. R.K. Joshi, Computer science department

- Made a project using C++ programming language entitled "**Virtual Stock market**".
- It was a real-time simulation of a virtual stock market with authentic graphical user interface.

3. **Structural Analysis of Brooklyn Bridge** [November 2011]

   Guide: Prof. **K. Narasimhan**, MEMS department.

- Made a project on the Structural Properties of **Brooklyn Bridge** involving a Presentation, Report and a Model of the bridge.

Positions of Responsibility:

1. **Internship Coordinator ,placement Cell:** Responsible for finding newer avenues for student internships by coordinating with **international internship institutions, companies** and professors in coordination with a 24 member team.

2. **Events Manager , "PADARTH":** Working as the **Events Manager** of the **MEMS department festival** "PADARTH", having areas like competitions, workshops and lecture series to execute and supervise.

Key Extra-Curricular Activities:

Technovation

- Won **3rd place** in the Junkyard Wars finals, organized in department festival of **MEMS** department of IITB **(Padarth**)-2011. The only first year students team to reach the finals.
- Made a bot called "**Hydronoid**" operating on the basis of hydrostatic pressure with a new mechanism in **Techfest, 2011**.(no electrical force.)
- Made a remote controlled electric car in a competition called "**Trackmania.**"

Others

- Volunteered in **NSS** (National Social Services) in the field of **Education Outreach** and **Events** for a year, helping in the cause of educating the poor children.