

Experience of *Arvind Devanathan* Master Program in Chemical Engineering (Process Systems Engineering)

I would like to introduce myself as Arvind Devanathan from India. It's a great opportunity for former students like me to share my views about our department. I completed my Master of Science in Chemical Engineering and so would like to talk specifically from that perspective.

I would like to start from the first semester of my master program. As a student from India, I saw a big difference in the style of teaching and also the way technical concepts were handled. I liked the idea of Professors dealing with theoretical concepts and assistants given the responsibility of exemplifying them. It gives students a better understanding of the need for certain theories and how they work, or at least I see it this way.

The second semester saw me performing some laboratory experiments and again the total independence to conduct the experiments was a pleasure, wherein I learnt a lot. Unfortunately I was not blessed with committed batch mates and so had some hardships. I saw these hardships as a challenge and at the end of the day I learnt something useful – *Crisis Management*.

The third semester is one of the most memorable parts of my entire study where we were exposed to Group Project. The task itself was nothing new to me but the way the task had to be done was totally new. I remember doing such a theoretical task as my undergraduate thesis, but I did it alone. Here I was asked to do a similar task but in a group of 9 students, all from various countries and various cultural background. That made the task more difficult as I had to co-ordinate with other members without hurting their emotions, at the same time getting the task done. Though my memories of the group project are not so pleasant, I learnt some useful lessons. This project not only helped me gain an insight into real-life project scenario as it is done in industries, but also taught me how to work as a part of a group and be successful. I am sure this was the closest replica of industry life at the university.

The next and the final big event of my course was my Master Thesis. I did it at the Chair of Process Control under the supervision of Prof.Engell, Prof.Stursberg and Dipl.-Ing.Sonntag. This was an unforgettable 6-7 months of my course and I must personally thank Mr.Sonntag for helping me in the best possible way. I did feel sad that I missed out the opportunity of working under Prof.Stursberg which would have been a better learning experience. The mid-term presentation I had with Prof.Engell is still fresh in my memory. Before the start of the presentation I thought that I had made some headway in my thesis. I went into our Chair's library only to be proved wrong. Nevertheless Prof. Engell gave me some invaluable suggestions that not only motivated me to work even harder, but also helped me get some good results in the end. What followed were the most terrifying two months I experienced during my entire course, mainly because there was a basic problem with my approach which had to be changed and secondly the urge to get some good results to reflect the amount of work I had put into this thesis. To make things worse I was handed out a new HYCON benchmark specification. Since this variant of the model was a much better reflection of the system than the old one, I was tempted to implement it and this brought me to the state I was on day1. All these setbacks only motivated me to work even longer and with greater vigour. In the end I was happy that my thesis ended up with good results, which earned me a conference paper at the GMA Congress 2007. I take this opportunity to thank Prof Engell personally, had it not been for his suggestions during the mid-term presentation, my thesis would have led me nowhere.