GUJARAT TECHNOLOGICAL UNIVERSITY *Mid Semester PG Theses Review April-May 2011 First Steps: Moving Towards World Class Research*

Dissertation work for Master's Theses in Engineering has been done for more than 15 years now in Gujarat. Students were expected to work on their project with inputs from their guides or the industry. The students would then be examined by an external examiner and the guide as an internal examiner, upon submission of their dissertation work. The problem of this mode of evaluation was that either the work would be accepted with a few comments or in very rare cases, some additional work would be suggested. In both the scenarios, the student would be at a disadvantage as he/she would have little scope for going the extra mile after such a long and hectic pace of the final submissions. Some institutions have a practice of reviewing the progress through seminars. But this again would be done by an internal review committee.

In order to improve the quality of the dissertation work, GTU decided to do away with traditional model of bringing in the experts at the end. It was decided to hold Mid-term reviews, by inviting external examiners from IITs, national level elite institutions and experts from industry and academia on the review panels.

The new model has opened up the gates of addressing the missing links in the work of a student at exactly the right time. Two months away from their dead lines, they are just in the right mind set to absorb every comment on their work which is coming from none other than the acclaimed experts in their fields! At the same time they are not put under the intense stress they would otherwise undergo during their final defence of their work.

The experts on the other hand were happy too that their long journey and endeavour was being put to good use as there was ample scope for the students to incorporate/ modify their work before final submission.

GTU has declared continuously that the quality of education is what it wants to address. And we are happy that the first steps have had such a huge impact on its Master's Program.389 students were examined centrally at GTU by 240 experts in Engineering, along with their individual guides. The reviews were conducted in a manner which even the most critical of teachers accepted, as parallel to the best of the conferences they had attended.

Every student has been given the Review Comments by the experts, based on which they will give the final shape to their work. We are sure that the state-of-the-art of each course has been discussed during the review which has also served as an open forum for all the experts to interact.

Feedback from experts has been very encouraging. The suggestions will help improve the exercise further. Some expert's feedbacks:

Dr. K. N. Jha IIT Delhi



- ✤ I must thank the GTU for the wonderful initiative taken. I think you have set the example which other universities will be following soon if they have to survive in this competitive world.
- ✤ I was really impressed with the vision of the VC -GTU. I recall his statement which he made during the lunch on interaction with the reviewers and staff of GTU "The mid semester review is just a beginning and I want to celebrate the review week as the research week." I don't know how many VC's have the similar vision. In fact after coming back from GTU, I shared my experiences with my colleague at IIT Delhi, and they were also impressed with this initiative and vision.
- ✤ I was also impressed with the enthusiasm shown by the supervisors and the students of GTU who had come for the review. I am of the firm opinion that you should continue with this initiative.

Dr. A. R. Abhayankar IIT Delhi

It was my pleasure interacting with students and faculty members associated with GTU.



- This is a very good initiative by GTU and am sure, this will benefit students in general.
- The arrangements made by GTU were upto the mark and adequate facilities were made available at the presentation venue.
- IITs have mid-semester review system. And it can be said that it helps in improving the overall quality of the theses. GTU's efforts to follow the suit are commendable.
- Every year, these review meetings should be held around February – March so that students get adequate time to follow the suggestions.
- There needs to be a mechanism in place to keep tab of whether the suggestions given by the committee member are followed closely and seriously by the students in their final thesis.

Dr. Manoj S. Gaur MNIT Jaipur

The mid-term review mechanism a very valid and useful exercise. This will certainly consolidate the quality of work done at M.E./M.Tech level and provide definitive work sequence to all the students.

The following are the suggestions for the next time:



- Please schedule the reviews well in time may be in March if he final submission are due in June-July.
- Please send in the abstracts of the work done for the projects under review.
- The requirement for one paper (conference) may be useful but we observed that in some cases there is an overkill, few candidates have published 10-15 papers in last two semesters. It may be advisable that each department may identify good conferences for each area and then candidates may be encouraged to publish in those conferences only
- Also for reports and papers develop a mechanism to check for plagiarism control. It will improve the quality of submission to a very large extent

Dr. P S T Sai IIT Madras



- When some your universities finding difficult to pay a honorarium of Rs.1000/- for Ph D thesis evaluation, here is an university inviting people from as far as Chennai for mid term evaluation of ME theses! This shows your sincerity and seriousness in maintaining standards.
- My impression on the programme is based on my interaction with Chemical Engineering Department. Most of the theses are of good standard. There are few theses which are not progressing in correct direction and with the help of my colleague Dr. Poorani, we could correct them. While most of the theses are industrial problems (they call live problems), there are few concerning basic research also. This is good mix of basic research and industrial problems and is required as some of the students should go for Ph. D programmes.

Dr. Amit Agrawal IIT Bombay



- The idea of a mid-way review of the ongoing thesis work is very nice, such an exercise can help improve the quality of the thesis in any institute.
- While the quality of some of the thesis was very decent, there is enough time for others to pull-up. I look forward to seeing excellent thesis coming out from your university in the near future.

Dr. T. K. Nandi IIT Kharagpur



- The mid term review process is certainly an excellent step towards achieving a high standard M.E. Thesis. Usually only the final theses are evaluated for awarding the degree.
- In that evaluation, the concern student does not get any chance to improve as per the expectation of the external examiner.
- Through the mid term review, the student not only get a chance to improve the quality of the thesis but also in the process he or she learns some new things in the topic.
- Therefore, in my opinion this mid term review process is a brilliant idea and should be implemented in all other institutes in the country.