PROPOSALS FOR FUTURE MECHANICAL ENGINEERING CURRICULA

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Having studied the draft curricula and consulting the views of Chief Engineer and Plant Engineers at Unilevers I wish to propose the following points for consideration at the discussions.

- 1. Occupational Health, Safety and Environmental Management is a key area and a concern in most multi-national companies. This needs to be addressed/covered at University level. This can be an introductory course, which can fit into semester 5, 6 or 7. The idea would be awareness rather than an in-depth knowledge of this topic.
- Project Management and Maintenance Management techniques and skills are vital for the success of Plant Engineers. Project Management should be given prominence over Marketing which, can be a general introduction in semester 7. However, Maintenance Management, I presume, is not adequately covered or addressed in the curriculum.
- 3. The need to have Operational Research Techniques as a subject, as opposed to advanced Mathematics, has to be addressed.
- 4. More emphasis should be given to Management Accounting, as opposed to Financial Accounting, in Semester 5. Plant Engineers need to do cost, payback, IRR and NPV computations for capital projects as well as manage departmental budgets on a regular basis.
- 5. Industrial Energy Conservation is another topic that needs to be considered in view of the growing emphasis on Energy Management. This can be an introductory course, which can fit into semester 5, 6 or 7. The idea would be awareness rather than an in-depth knowledge of this topic.
- 6. There should be much more oral presentations and formal group discussions by students (facilitated by a lecturer), preferably after every subject or topic as appropriate. This significantly contributes towards improving the marketability of graduate engineers.

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