



About Engineering Council of India

Engineering Council of India (ECI) was established on April 4, 2002 as a Federation, by coming together of a large number of Professional Organizations /Institutions of Engineers to work for the advancement of engineering profession in various disciplines and for enhancing the image of engineers in society, by focusing on quality and accountability of engineers. Today there are 32 members representing practically all engineering streams. ECI does not and has no intention to modulate or control in any way the Technical Educational Colleges/ Institutions, anywhere and in anyway.

- 1) **State of Indian Engineering Industry today:** Our engineering manufactured goods and engineering services, except in some small pockets, stand nowhere in the international arena. The quality of our products leave much to be desired. Our exports are going down continuously for quite some time now. Even in our own country, we are swamped with imported goods as our products do not match their quality. As a result, our National Manufacturing base is stagnating or is in a contracting mode. Our Industry exists on foreign technical tie-ups. Once a tied up technology becomes outdated, we start thinking about another tie-up. This has continued for last so many decades, which has resulted in our industry's dismal position today. If this continues, our industry will always remain inferior to someone, and cannot dream of standing on its own two feet and competing in the International arena. Each and every one of today's Industrialized Nations have reached that status only and only on the back of their own entrepreneurs, their own industry, their own engineering professionals and their own Research and Development. A Nation became an Industrialized Nation only when its industry has developed product ranges which are not available anywhere else in the world.
 - 2) **Indian Technical Education Scenario:** One of the main factors for this dismal state of affairs is the competence of the Indian Engineering Fraternity. Today the Indian Engineering Fraternity is low in self-esteem, low in technical competence, not updated in the latest technology and techniques. We are churning out more than 1.5 million engineers every year. Out of these a vast majority are not fit to be employed by the industry, as they simply cannot be used by the Industry. Further, the ones who do have the minimum skills at the time of graduation, after 5-10 years also become technically outdated. Further, we pay only lip service to Research and Development, which is substantiated by the number of patents filed by Indian citizens and Indian companies every year. These are fraction of what any industrialized nation such as Japan files today. Does it mean that we, as a Nation, are dumb and do not have the intelligence to innovate and invent? No, it simply boils down to that our engineers or technologists are not updated in their skills and knowledge. This situation is further aggravated by to the Industry's fascination for foreign technical tie ups. We have to take immediate and urgent steps to reverse this trend.
 - 3) **What an Indian Engineer needs to do:** We, as responsible Indian Citizens, can do something to reverse this trend. The solution is to put in place a screening process at the graduation level, to separate the chaff from the wheat. The unready ones should be
-



advised to retrain themselves, acquire the basic skills and then again try to qualify. Further, the qualified ones should also be advised that their acceptance is subject to that they have to continuously keep upgrading their skills. The already placed ones also need to undergo the same process of periodic upgradation of skills. In addition, the engineer should also conform to a code of ethics. This is the only way the Indian Engineering Fraternity can aspire to reach the desired level of stature. The most capable and right body, to promote and modulate these activities for a particular stream of engineering, is that discipline's respective Professional Association, such as for software and IT - CSI, Material Science and Metallurgy - IIM etc etc. Some professional bodies have taken up on their level, but the effect is not tangible. To really make it felt and be effective across the length and breadth of the country, the activities need to be initiated and sustained at all levels, by all streams of Engineering in a uniform manner.

- 4) **ECI's registration process incorporates and sums up** all the requisite steps enumerated above. Its role is to ensure that there is cohesiveness and uniformity in the various steps taken by its Member Associations to make the Indian Engineering Profession meet the Indian Nation's and Indian Society's aspirations. The Forms etc., are available on the web site.

5) Advantages:

i) **To an engineer:-**

- a) Can add this designation to his CV.
- b) Will convey to the employer that his domain knowledge is superior to the general lot, hence would result in higher perks or value.
- c) This would instill a sense of pride in his domain, encouraging him to perform even better.
- d) Due to the higher technical competence levels of these Professional Engineers, better Indian products shall be available, thus enhancing the Indian Industrial might in the world arena. Better products mean more orders, implying expansion of the Indian manufacturing base, resulting in more jobs for Indian Engineers.

ii) **To an employer:-**

- a) Due to the higher technical competence levels of these Professional Engineers, better Indian products shall be available, thus enhancing the Indian Industrial might in the world arena. Better products mean more orders, implying expansion of the Indian manufacturing base, resulting in more business opportunities.
- b) Due to higher skills, lower rejections, higher outputs, implying higher profit margins, increased profitability.

Employers:- The employers have also to pitch in and support this initiative. They need to encourage their engineers, who are already employed with them, to register & join this process and continuously upgrade their skills **and** also to preferentially employ engineers who are already a part of this process.



iii) For the Nation:-

- a) Due to the higher technical competence levels of these Professional Engineers, better Indian products shall be available, thus enhancing the Indian Industrial might in the world arena.
- b) Better products mean increase in exports, better trade balance.
- c) Better trade balance means more political and economic clout in the world, for the country.
- d) Higher production/ requirements result in Expansion/ more industries imply more jobs, resulting in enhancement of wellbeing in the society, means better standard of living for the citizens, more peaceful and docile population.

iv) For the Academia: -

- a) Seek assistance and involve the MAs and the industry, in training during the academic years of all engineering students, so that they become industry ready when they complete their education. Result in knowing the industry to a greater depth.
- b) Assist the industry and the engineers to identify potential projects and opportunities. More revenues for the colleges and academic institution, conduct appropriate research, and undertake design and development of engineering solutions, in association with the industry and the MAs. Implement design solutions, and evaluate their effectiveness, in association with the industry and the MAs.
- c) Assist the MAs and the Industry in upgrading the skills and knowledge of the engineers. Higher grading and importance in the academic circle.

-----X-----