

AMEN

The Association of Mechanical Engineers

NEWSLETTER

Published by the Association of Mechanical Engineers, IIT Kanpur

“An ounce of practice is worth more than tons of preaching.”

– Mahatma Gandhi

From The Department

Placement Scenario '06-07 for Mechanical Engineering Deptt.

This time IIT Kanpur had two phase of placement. First phase was held in December first week and second phase was scheduled from last week of December. If we are concerned about mechanical engineering core companies then this time we had a considerably good placement scenario in comparison to last year. In first phase some of the mechanical core companies that visited IIT Kanpur were ITC, GE ITC, TVS Motor, Ashok Leyland and Ansys Fluent. Management and banking companies that recruited from our campus were Lehman Brothers, Deutsche Bank and in the second phase M&M, Quest global, Bajaj Auto, Force Motor, Pressure Equipment, Pacific Mindware, Geometrics software, Tata Motor, TCE and IBM. We can get a picture of the placement scenario by the fact that more than 40 % mechanical engineering batch got placed in the first phase. Most of the core companies were offering exciting job designation and lucrative packages. This time almost all core companies had a 20% hike in there packages. ITC, Pacific mindware, Ashok Leyland, and TVS were among highest paying core companies.

Almost every company started their recruitment process with an aptitude test. Core companies also took technical test based on fundamentals of mechanical engineering. The shortlisted candidates faced Group Discussions. GD round were followed by technical and Human Resource interview. Most of the companies were looking for technically sound students and they tested candidate's fundamental knowledge in mechanical engineering and how much

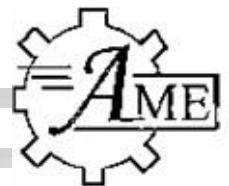
knowledge they had acquired from courses and thesis work.

The role of department representative for the branch placement is very crucial and this time I got this opportunity. We had a team who basically worked for maintaining the list of companies inviting them for recruitment through SPO. We also succeed in adding some new companies to our placement list. I would like to express my gratitude towards my batch mates for their cooperation.

Ankur Bhagat
Y5105009
M.Tech (SMD)

New AME PG Council

President: Ankit Rajesh Surti
General Secretary: Puneet Kumar



Dear Friends,

We invite articles for the Association of Mechanical Engineers Newsletter. AMEN which is now running its second volume and keeps you updated on what's happening in the department and other interesting facts from around the globe.

Very soon the AME t-shirts will be out and you can win them by writing for AMEN. Now onwards every month we'll give out a free T-shirt for the best article. Articles can be on any topic but those having even the vaguest connection to mechanical engineering will be given preference.

You can mail in your articles to shubham@iitk.ac.in Looking forward to your contribution.

AMEN Team

Air Bags

Airbags are a type of automobile safety restraint like seatbelts. They are gas-inflated cushions built into the steering wheel, dashboard, door, roof, or seat of your car that use a crash sensor to trigger a rapid expansion to protect you from the impact of an accident.

History

Allen Breed was holding the patent to the only crash sensing technology available at the birth of the airbag industry. Breed invented a "sensor and safety system" in 1968, the world's first electromechanical automotive airbag system.

However, rudemental patents for airbags go back to the 1950s. Patent applications were submitted by German Walter Linderer and American John W. Hedrik as early as 1953

In 1971, the Ford car company built an experimental airbag fleet. General Motors tested airbags on the 1973 model Chevrolet automobile that were only sold for government use. The 1973, Oldsmobile Toronado was the first car with a passenger air bag intended for sale to the public. General Motors later offered an option to the general public of driver side airbags in full-sized Oldsmobile's and Buick's in 1975 and 1976 respectively. Cadillacs were available with driver and passenger airbags options during those same years. Early airbags system had design issues resulting in fatalities caused solely by the airbags.

Airbags were offered once again as an option on the 1984 Ford Tempo automobile. By 1988, Chrysler became the first company to offer air bag restraint systems as standard equipment. In 1994, TRW began production of the first gas-inflated airbag. They are now mandatory in all cars since 1998.

Types of Airbags

There are two types of airbags; frontal and the various types of side-impact airbags. Advanced frontal air bag systems automatically determine if and with what level of power the driver frontal air bag and the passenger frontal air bag will inflate. The appropriate level of power is based upon sensor inputs that can typically detect: 1) occupant size, 2) seat position, 3) seat belt use of the occupant, and 4) crash severity.

Side-impact air bags (SABs) are inflatable devices that are designed to help protect your head and/or chest in the event of a serious crash involving the side of your vehicle. There are three main types of SABs: chest (or torso) SABs, head SABs and head/chest combination (or "combo") SABs.

(An extract from *about.com*)

Is something missing in IITians??!!

Hope everyone is aware of some basic rules/bans Indian government have put up, like, (i) Ban on smoking in public places, (ii) Traffic rules like: not more than two persons in a two-wheeler and speed limit, (iii) Child labor, etc. Still, one can find **some** students/ staffs/ professors smoking in IITK premises like academic canteen, department corridors, hostel canteens, etc., children working in canteens, vehicles moving at high speed inside IITK, some times more than two traveling on a two-wheeler (and security people just watching at it), and someone not even following the basic traffic rules. If we, the IITians – the most brilliant and educated people of India, do not follow or do not stop then whom can we expect to do that? Farmers/daily wage worker/ uneducated people???

Those who do these things can find thousands of excuses to validate. If one is sure that doing these things will not affect the society then he/she can go ahead else he/she should stop. One can give advice to uneducated people or to those who are not aware of the harmful effects, hiding in that, but not to IITians (students/ staffs/ Professors). It will be shame to advise IITians, as being into India's reputed university like IIT, these things become common sense and one should take care.

Have you ever thought of what a well educated person, who really care about these rules/bans, thinks about IITians and IIT standard if he find out IITians are not respecting these rules/bans??? Think!!!!...

B.R.B. Vijay Kumar
Y5105090