

Introduction to Engineering and Program

This course being a flagship course to be offered to fresh entrants, it has an important role to play in terms of orienting and exciting students in the subject of engineering in general and their respective specializations in particular. The course spans over two semesters covering Introduction to Engineering (First Semester) and Introduction to Respective Programme (Second Semester). Primary objectives of this course can be stated as follows:

- Expose students “Engineering” as a vehicle for social and economic development.
- Educate students how research in science/engineering has enormous impact on our day to day lives. (Bring out the strong relation which exist between science/engineering and societal needs)
- Enlighten students about process of engineering a product as it happens when people of varied disciplines work together in teams.
- Excite students by connecting them with potential role models and successful alumni in engineering profession.
- Enthuse students about various career options available to them

Some of the activities which can be taken up to realize above objectives include:

- Product dissection exercises, screening of exciting videos, design & innovation exercises.
- Thought provoking lectures on exciting topics by successful industrialists, entrepreneurs, designers and alumni.
- Exposing successful research cases, products and innovations which have reached people/industry/society. (Examples can be taken from both within and outside institute)
- Hands on exercises/demonstrations in laboratories including use of breadboard circuits, legos, robot kits, balsa bridge engineering kits, Fiber optic kits, mobile apps etc.
- Visits to Industries and on-going exhibitions in the city.

Example: Identify three products from diverse areas (such as ICT, Bio and Electromechanical) and conduct three sessions for each of the products consisting of a) Lecture cum interactive session by an industry professional who designed/developed the product b) presentations by institute faculty from different departments/centers providing useful insights about the same product to demonstrate interconnectedness of different specializations and c) breakout sessions among students and faculty in smaller groups to discuss more details about the same product.

Faculty for this course is expected to be chosen not only from departments offering UG programmes but also from other departments/centers as well. As the course is a non-grade mandatory in nature, It is necessary to get a satisfactory (S) grade in this course for completing the degree requirements.