

Course classification	Technical Art
Course code	BIC 603

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3	0	3	4

PRODUCT DESIGN AND DEVELOPMENT

Faculty member: Mr. Goldin R. Bennet

Course Aim: The course is intended to provide the students with:

1. Competence in a set of tools and methods for product design and development.
2. Confidence in their own abilities to create a new product.
3. Exposure to the role of different functions in creating a new product.
4. Capability to coordinate different, interdisciplinary tasks in order to achieve the objective of creating a new product.
5. Ability to consolidate and build on specific knowledge from other courses through practice and reflection in a realistic and result - oriented setting.

Project material and expenses: The students are required to choose a reasonably inexpensive project. The material and facilities provided by the Institute will be restricted to what is available in the Institute at that time. The overall team budget is Rs. 2000/- for a team of five students. Any expenditure beyond this amount must be borne by the team. If the team has any intention of developing a product with the aim of marketing it, they may do so. But the expenses should be borne by the team beyond the stipulated limit.

Evaluation of the course: The students will be evaluated on their specific knowledge of industrial design, engineering, production and economics during the cycle tests. The final evaluation will be done only after the final working model is completed. In case the students did not complete the prototype during the semester period, they will have to complete it during the summer vacation to earn the credits. To pass this course, the team must submit at least the alpha prototype of the product.

Expected outcome of the course: The students are expected to have a realistic team project. The project must preferably have a specific instrumentation and / or control engineering content to it. The initial classes will be towards familiarizing the students in the various aspects of the product design and development cycle. During the practical hours of the course the students may work in the appropriate labs or work-shops. The students are expected to work as teams. At the end of the course the students are required to come out with a working and marketable model of the product.

Intellectual property rights: The teams will generally retain the Intellectual Property Rights (IPR) of the inventions they develop during the course. They may even patent it themselves.