

**DESIGN / FABRICATION PROJECT**

**Objective:**

To develop the ability to conceptualize a product, apply standard/innovative design techniques and realize the product through fabrication with focus on design-manufacturing integration.

**Course content:**

Identification of possible improvements in an existing product, conceptualization of a new product/part, design of the part using design methodologies, selection of material(s), preparation of process flow chart for manufacturing, fabrication of the part using the available in-house facilities, assembly, testing of the functionality of the product.

The students should come up with their own original and innovative ideas for product design. The task may be performed by student teams/groups.

**Course Outcome:**

Through this course the student is expected to learn realization of a product, conceptualized and designed by him. The student gets hand on experience of the entire chain of manufacturing steps with an understanding of design-manufacturing integration.

