

## **IIT Mandi**

### **Proposal for a New Course**

**Course number** : IC202P  
**Course Name** : Design Practicum  
**Credit** : 3  
**Distribution** : 0-0-6-3  
**Intended for** : UG  
**Prerequisite** : IC202P – Design Practicum  
**Mutual Exclusion**: NA

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#### **1. Preamble:**

In this course, the teams are asked to design a prototype based on commercially-off-the-shelf (COTS) hardware or software (Preferably open source). Prototypes are used to gather requirements and are especially useful in visualizing the look and feel of an application and the process workflow. The prototype can be used as the basis for developing the final solution. The goal when developing such prototypes is to capture the functions and appearance of the finished product. These prototypes are used for testing and evaluation and provide useful information for the user to rank the products or the features.

#### **2. Course Modules with quantitative lecture hours:**

The course does not have any dedicated lecture hours. This is a laboratory course; the students will develop the prototype in the labs.

#### **3. Text books:**

- Rapid Prototyping: Principles and Applications by Chee Kai Chua, Kah Fai Leong, Chu Sing Lim. World Scientific Publishing Company Pvt. Ltd.
- User's Guide to Rapid Prototyping by Todd Grim. Society of Manufacturing Engineers.
- Engineering Drawing Practice for Schools & College. SP46:2003.
- Illustrating sourcebook of mechanical components by Robert O. Parmely, P.E McGraw-Hill

#### **4. References:**

NA

**5. Similarity with the existing courses:**

**(Similarity content is declared as per the number of lecture hours on similar topics)**

NA

S. No.		Course Code	Similarity Content	Approx. % of Content	
1.					

**6. Justification of new course proposal if cumulative similarity content is >30%:**

NA