



# DESIGN, TECHNOLOGY AND INNOVATION

## **PROF. B.K.CHAKRAVARTHY**

Department of Design Engineering  
IIT Bombay

**INTENDED AUDIENCE :** Open for all

### **COURSE OUTLINE :**

The course on Design Technology and Innovation portrays innovation as it weaves together a multitude of domains like design, technology, humanities and management. Through the span of 8 weeks, we have professors from various departments who will narrate their stories of how they took their research to innovation for the benefit of the community at large. The initial lectures focus on establishing the methodology of innovation by showcasing the collaborative model of innovation and the Chakku's 7 Concerns which forms the backbone of the innovation process. As the professors walk you through their innovation success stories, you will be able to learn and understand the pitfalls of innovation and the stages of transformation of research into innovation. Through these case studies, you will not only learn the stages of the innovation, but also learn to collaborate with different people of different disciplines. The passion with which the professors go beyond their routine to innovate will inspire you to take up innovation in your areas of work.

### **ABOUT INSTRUCTOR :**

Prof. B. K. Chakravarthy teaches Innovation by Design at the Industrial Design Centre (IDC), IIT Bombay. He has set up the Shenoy Innovation Studio at IITB, where students and young designers are given the opportunity to work on live projects and benefit from expertise in a range of interrelated fields. Prof. Chakravarthy works closely with other academics engaged in cutting-edge research at IIT Bombay and has played a key role in translating such research into products that reach the hands of users. A Collaborative Model for New Product Innovation, an outcome of Prof. Chakravarthy's doctoral research, has had wide application in the industry. Prof. Chakravarthy has also worked frequently with government departments and occupational communities engaged in essential services.

### **COURSE PLAN :**

**Week 1** : i. Jaipur Foot - A classic innovation by Prof. B. K. Chakravarthy

ii. User Centred Helmet Design by Prof. B. K. Chakravarthy

**Week 2** : Challenges of Reaching a Million Users by Prof. Chetan Solanki and Prof Jayendran V

**Week 3** : i. Technology to Solution by Prof. Ramesh Singh

ii. Collaborative Excellence by Prof. B. Ravi & Prof. B. K. Chakravarthy

**Week 4** : Collaborative Innovation Methods by Prof B. K. Chakravarthy

**Week 5** : Learnings from Grassroot Innovation by Prof. Anil Gupta

**Week 6** : Systemic Approach to Biomed Innovations by Prof. B. Ravi

**Week 7** : Research to Innovation by Prof. Amaresh Chakrabarti

**Week 8** : Smartcane for the Blind- A Success Story by Prof. P. V. Madhusudhan Rao