

Indian Institute of Technology Kanpur

Proposal for a new course

1. Course Number: DES 5XX
2. Course Title: FUNDAMENTALS OF INTERACTION DESIGN
3. Per week lectures: 02 (L), Tutorial: 0 (T), Laboratory: 3 (P), Additional Hours: 0
Total Credits: 9 (3*L+2*T+P+A)
Duration of Course: Full Semester
4. Proposing Department: Design
Other Departments/IDPs which may be interested in the proposed course: CSE, IS, EE
Other faculty members interested in teaching the proposed course: NA
5. Proposing Instructor(s): Abhishek Shrivastava, Ph.D.
6. Course Description
 - a. Objectives
 - i. To enable the learner in developing a foundational understanding of interactive systems design – including an understanding of different concepts, processes of design and evaluation.
 - ii. To enable the learner in understanding the state-of-the-art in the domain of interactive design and be able to imagine newer interactions across distinct contexts of applications.
 - iii. To enable the learner in developing an ability to appreciate and distinguish contexts of application of interactive designs.
 - b. Contents

S.no.	Broad titles	Topics	No. of Lectures
1	Introduction of Interaction Design – Definitions, concepts, canonical perspectives	Basic concepts in Interaction Design – Defining interfaces, and interactions Interactivity – Understanding the genesis of the term, its contemporary understanding and strategies of applications Historical perspectives in interaction design – ways of thinking, people and contributions	8
2	Interaction Design – Models and Paradigms	Interaction Models – Developing an understanding of structural aspects in interactive design	7

		Interaction Paradigms – understanding the paradigms that define interactions across different contexts, applications and technology timeline	
3	Contemporary trends in Interaction Design	Design trends in Interaction Design – unimodal and multimodal Interfaces, strengths and limitations of different modalities, trends in human control and automation	5
4	The Interaction Design Process	Interaction Design Process: Understanding the details and the relevance of design activities undertaken across the distinct phases of Interaction Design Process; Understanding how different process elements complement each other along with their individual strengths and limitations. PACT: A framework for designing interactive systems	10
5	Evaluation and Reporting	Evaluation of Interactive Design: types of evaluation – summative and formative, expert evaluation, participant-based evaluation, evaluation in practice, and related concerns	10

Total lectures: 40

c. Pre-requisites, if any: NIL

d. Short-summary for including in the Courses of Study Booklet:

The course of “Fundamentals in Interaction Design” enables early stage designers to understand the fundamentals of interaction design as one of the verticals of design interventions. It enables them with an understanding of essential concepts and processes, including aspects of testing their interactive design with the design contexts, and equip them with an understanding of the growth trajectory of the interaction design and emerging trends.

7. Text Books/ references

[1] Sharp, H., Preece, J., Rogers, Y., Preece, J. (2019). Interaction Design: Beyond Human-Computer Interaction. United Kingdom: Wiley.

[2] Benyon, D. (2019). Designing User Experience. United Kingdom: Pearson.

[3] Ben Shneiderman, Catherine Plaisant, Maxine Cohen, Steven Jacobs, Niklas Elmqvist, and Nicholas Diakopoulos. 2016. Designing the User Interface: Strategies for Effective Human-Computer Interaction (6th. ed.). Pearson.

[4] Alan Cooper, Robert Reimann, David Cronin, and Christopher Noessel. 2014. About Face: The Essentials of Interaction Design (4th. ed.). Wiley Publishing

[5] Saffer, D. (2013). Microinteractions: Full Color Edition: Designing with Details. United States: O'Reilly Media.

8. Any other remarks



Dated: 9 June 2026 Proposer: Abhishek Shrivastava, Ph.D.

Dated: _____ DUGC/ DPGC Convener _____

The course is approved/ not approved

Chairman, SUGC/ SPGC

Dated: _____