PMRF-ISSS Teaching Programme
Prime Minister Research Fellowship students' teaching requirement
facilitated by the Institute of Smart Structures and Systems

Module PMRF-ISSS003/2022
Introduction to Product Design
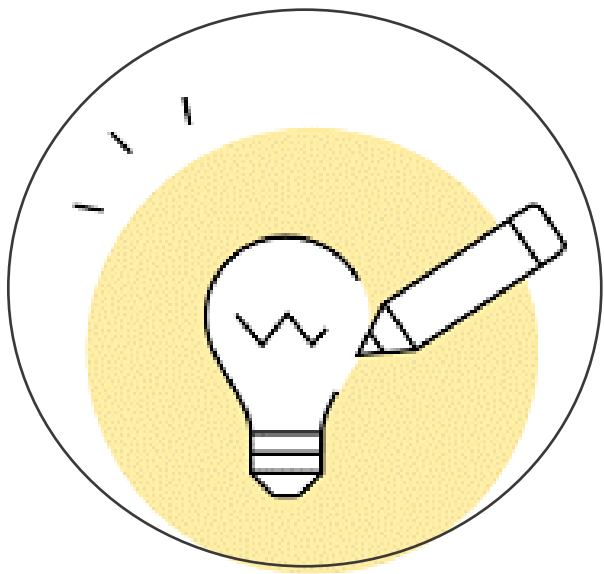
Name of the PMRF student

Vighneshkumar Rana, IISc

Required background of the students taught

- Undergraduate and postgraduate students of engineering (Any engineering background)
- Anyone curious to learn basic Product design principles (No pre-requisite)

Online session coordinator

Will be chosen from the list of registrants

Details of the content of the module

1. Introduction: Definitions of Design, Products, Product Design, Examples, Problems, Areas of Product Design

2. Product life cycle, Introduction to systematic design process

3. Design Thinking and Problem Solving

4. Opportunity identification and identify customer needs: Process, Techniques, Customer need, Relative importance of need, Results

5. Task Clarification: Identifying requirements, refine, extend, compiling, Setting up requirements list

6. Conceptual Design: Activity of concept generation, Steps, Reflect on solution

7. Concept Selection and Testing: Screening and Scoring, Testing procedures

8. Prototyping: Types, Principles, Technologies, Planning

9. Design for "X"

10. Product Design Research overview

Schedule of the module

Start Date: 1st April-2022

End date: June-2022

Every Friday: 6:00 – 7:00 pm

Discussion Class: Last Saturday of month starting from 6:00 pm

Meeting link : Will be shared later

Contact email ID: isss.forum@gmail.com

Registration link:
https://docs.google.com/forms/d/e/1FAIpQLS dW5nqRYcUt3cR0hAJ0xuw2qD68FP95Xa1g0W 0VqN7Z67QSFA/viewform