C. U. SHAH POLYTECHNIC, SURENDRANAGAR

SSIP 2.0 – DESIGN THINKING AND PROTOTYPING

PROGRAMME REPORT

Programme	SSIP 2.0 – Design Thinking and Prototyping
Date	13 August 2026
Venue	C. U. Shah Polytechnic, Surendranagar
Conducted By	SSIP Coordinator
Total Participation	217 Students

1. Introduction

C. U. Shah Polytechnic, Surendranagar conducted a programme on "SSIP 2.0 – Design Thinking and Prototyping" on 13 August 2026. The programme was conducted by the SSIP Coordinator with the objective of developing an innovation-oriented mindset among students and introducing them to systematic problem solving, idea generation and prototype development.

2. Objectives

- To create awareness regarding SSIP 2.0 and student innovation opportunities.
- To introduce students to the principles and stages of Design Thinking.
- To encourage identification of real-life problems from society, industry and the campus.
- To promote creative thinking, brainstorming and generation of innovative ideas.
- To explain the importance of prototyping, testing and validation.
- To motivate students to convert innovative ideas into practical projects and prototypes.

3. Programme Overview

The programme focused on the journey from identifying a problem to developing and validating a possible solution. Students were encouraged to understand the needs of users before proposing solutions and to adopt an iterative approach in which ideas are developed, tested, improved and refined.

4. Design Thinking Process

Stage	Key Activity	Outcome
Empathize	Understand users and their needs	User insights
Define	Identify the core problem	Problem statement
Ideate	Generate and evaluate ideas	Innovative concepts
Prototype	Develop a basic model / PoC	Prototype
Test	Collect feedback and improve	Validated solution

SSIP 2.0 – PROGRAMME ACTIVITIES & OUTCOMES

5. Programme Activities

- Introduction to SSIP 2.0 and the importance of student innovation.
- Discussion on problem identification and user-centric thinking.
- Explanation of the five stages of Design Thinking.
- Brainstorming and ideation for developing innovative solutions.
- Introduction to prototype development and Proof of Concept (PoC).
- Discussion on testing, user feedback, modification and improvement of prototypes.
- Motivation for participation in SSIP projects, project exhibitions and entrepreneurship activities.

6. Prototyping Approach

Students were made aware that a prototype need not always be a fully finished product. Depending on the nature of an idea, a prototype may be a physical working model, CAD model, 3D-printed component, electronic/IoT model, software mock-up, mobile/web application prototype or a Proof of Concept. The emphasis was placed on developing, testing and improving the solution through an iterative process.

7. Student Participation

A total of 217 students participated in the programme. The participation demonstrated strong interest among students in innovation, entrepreneurship, Design Thinking and prototype development.

8. Key Outcomes

- Students gained awareness of SSIP 2.0 and its role in promoting student innovation.
- Students understood the importance of identifying the actual problem before developing a solution.
- Students learned the basic Design Thinking framework: Empathize, Define, Ideate, Prototype and Test.
- Students developed awareness about prototype development and Proof of Concept.
- Students understood the importance of user feedback and iterative improvement.
- Students were motivated to develop innovative projects and participate in SSIP activities.
- The programme created a foundation for future project development, exhibitions, incubation and entrepreneurship.

9. Expected Follow-up Activities

- Identification and documentation of innovative problem statements.
- Formation of student innovation/project teams.
- Development of initial concepts and prototypes.
- Testing and validation of prototypes with users.
- Documentation of projects for SSIP support and project exhibition.
- Exploration of industry linkage, intellectual property and startup opportunities where applicable.

SSIP
SIP 2.0
esign Thinking & Prototyping

SSIP 2.0 – PROGRAMME DOCUMENTATION

10. Impact of the Programme

The programme provided students with an initial practical understanding of innovation methodology. By linking Design Thinking with prototyping, students were encouraged to move beyond theoretical ideas and consider the feasibility, usability and improvement of their proposed solutions. The activity also strengthened the role of the SSIP Cell in creating an innovation and entrepreneurship ecosystem within the institution.

11. Conclusion

The SSIP 2.0 – Design Thinking and Prototyping programme conducted on 13 August 2026 at C. U. Shah Polytechnic, Surendranagar was successfully completed with the participation of 217 students. The programme helped students understand the systematic process of converting real-world problems into innovative ideas and subsequently into prototypes. It encouraged students to adopt a user-centric, creative and solution-oriented approach and motivated them to actively participate in SSIP innovation and entrepreneurship initiatives.

SSIP Coordinator
C. U. Shah Polytechnic, Surendranagar