

10. Each team will be mentored by a faculty from AIISH, Mysuru.
11. The ideas presented by the team should not have been presented/published in any previous event/programs.
12. Each team is advised to check the open source patent/copyright websites before development of the solution. This is to avoid future conflicts arising due to infringement/counterfeiting.
13. All members of the team should be equally involved in the presentation.
14. Each team must submit a written declaration stating that their solution is original and is not copied from existing technologies and methodologies.

## Guideline for presentation

1. Each presentation should have maximum of 10 slides excluding title slide
2. Slide 1: Description of the Problem Statement
3. Slide 2: Proposed solution
4. Slide 3: Novelty of the proposed solution (How is it different from the existing one)
5. Slide 4: Methodology (Technical aspects – Software/Hardware design)
6. Slide 5: Implementation (Flow chart)
7. Slide 6: Key features of the solution
8. Slide 7: Impact on the Target population
9. Slide 8: Limitations and future scope
10. Slide 9: Time Line of development (PERT Diagram – How much time it may take to proceed in each step connecting the idea to prototype)
11. Slide 10: References/links

## Final Selection Process

03 months after the Hackathon, all the six selected solutions will be evaluated by a group of experts from the field. The selection process will be based on novelty, methodology, usefulness, practical implementation, impact on the users, future scope and potential for patenting.

## Registration

1. Pay Registration fee of Rs. 500/- per group by scanning the QR code.



Scan for payment

2. Fill the registration form by scanning the QR code and submit. Transaction details to be entered in this form.



Scan for registration

### Last date for Registration

**12<sup>th</sup> February, 2025.**

## Contact for further details

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# HACKATHON ON ASSISTIVE TECHNOLOGY 2025

**(AIISH-HAT 25)**

**21<sup>st</sup> February, 2025 (Friday)**

### **Prize**

**1<sup>st</sup> Prize** - Rs. 10,000/- + Award + Citation

**2<sup>nd</sup> Prize** - Rs. 7,500/- + Award + Citation

**3<sup>rd</sup> Prize** - Rs. 5,000/- + Award + Citation

### **Organized by**

**CENTRE FOR REHABILITATION ENGINEERING,  
ACOUSTICS AND BIOMEDICAL ENGINEERING (CRAB)**

**CENTRE OF EXCELLENCE**

**ALL INDIA INSTITUTE OF SPEECH AND HEARING**

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## About

AIISH – HAT 25 aims to bring together engineers and designers from various technical institutions to create prototype of hardware/software applications and smart solutions in assistive technologies that can tackle the real world challenges and improve the lives of persons with speech, language and hearing disabilities.

## Who can participate?

M.Tech/MCA students, 5<sup>th</sup>/6<sup>th</sup>/7<sup>th</sup>/8<sup>th</sup> Semester BE/B.Tech Students and Final year Engineering Diploma students.

## Objectives

1. To raise awareness on the importance of developing indigenous assistive technology devices with empathy to create an inclusive community
2. To prioritize prototyping process for the individuals by promoting the innovation in assistive technology
3. Applying the Engineering Solutions in real world problems to provide accessibility and usability of the assistive technology for persons with speech, language and hearing disabilities

## Problem Statements

### Problem Statement 1:

Development of online Interactive Tele – Consultation tool for Speech Language Pathologists (SLPs) and Audiologists

Scan for details



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**Problem Statement 2:** Multi Modal Response System (Eye tracking + Switch Scanning)

Scan for details



**Problem Statement 3:** Web - Based Sign Language Translation tool

Scan for details



**Problem Statement 4:** Indoor Navigation System with vibrotactile stimuli

Scan for details



**Problem Statement 5:** Assistive system for swallowing disorders

Scan for details



**Problem Statement 6:** Two Way Communicating Speech Generating Device

## Instructions

1. Each team can select any one among the given problem statements and present the proposed solutions. The presentation shall be strictly as per the guidelines below.
2. A team can have up to 5 participants from same college (No inter-college teams). Each team should have one faculty from their college as guide.
3. A letter from the Principal/HOD on the letter head of the college has to be mandatorily submitted mentioning the Leader of the team, team members and guide name.
4. The leader of the team will be the point of contact pre and post Hackathon.
5. Time of 10 Minutes for presentation and 5 minutes for discussion (negative marks for overshooting this time).
6. The presentation will be graded as per the following parameters.  
  
Novelty – 10 Marks, Methodology – 10 marks, Usefulness – 10 marks, Feasibility – 10 marks, Impact on the disabled population – 10 marks, Future Scope – 5 marks, Literature review – 5 marks, Team involvement – 10 marks, Presentation – 20 marks, Question & Answers – 10 marks.
7. Based on the highest marks obtained in the presentation, one team will be selected for each problem statement.
8. The six selected teams will have to implement and submit the software/hardware/hybrid models within 3 months from the date of presentation.
9. The 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> prizes will be awarded from these six teams based on the final selection process.