

RCCIIT Smart Bengal Hackathon 2023

○ **ABOUT RCCSBH 2023**

Smart Bengal Hackathon 2023 is a statewide initiative to provide engineering and school students to solve some of the common problems we face in our daily life; and thus inculcate a culture of product innovation and a mindset of real time problem solving.

○ **RCCSBH 2023 Process Flow**

RCCSBH2023 Software & Hardware Edition: Problem statements submission by Core Industry, IT sector, Start up, PSUs, State Ministries & NGOs



STEP 1

Submission of Problem Statements (PSs) by Core Industry, IT sector, Start up, PSUs, State Ministries & NGOs on the SBH portal. Review of Submitted PSs & finalization by concerned committee & publish finalized PSs



STEP 2

Registration of College SPOCs on SBH portal Blocking published PSs by SPOCs of Colleges or school or Institutes Internal campus hackathon to be conducted in each college or school or institute by their SPOCs on their blocked PSs.



STEP 3



STEP 4

College / school SPOC to be responsible to conduct internal hackathon in the college/school to finalize total best 10 teams + 5 waitlisted teams from the internal hackathon. SPOC to recommend the selected teams for SBH 2023 Hardware /Software edition at SBH portal.



STEP 5

Team leaders of the selected teams to be registered at the SIH portal to submit ideas Submission of ideas by selected teams against PSs by college SPOC for the SBH2023 Finale Evaluation of submitted ideas.



Step 6

Result Analysis and Result Publication.

- **RCCSBH 2023 Themes**

No problem is too big-no idea is too small

- a) Smart Vehicle
- b) Robotics and Drones
- c) Disaster Management
- d) Smart Education
- e) Smart Automation
- f) Intelligent Transportation and logistics
- g) Clean/Green Technology
- h) Renewable and sustainable energy
- i) Blockchain and Cybersecurity
- j) IOT with AI
- k) Agriculture , Foodtech and Rural Development
- l) Biotech and healthcare
- m) Miscellaneous

- **RCCSBH 2023 Problem Statements**

○ **SBH 2023 Teams**

Implementation team:

Convener: Dr. Alok Kole, President, IIC

Jt. Convener: Dr. Hiranmoy Roy, Member, Technical Sub-Committee, SASWC

A. Promotion and Sponsorship Sub-Committee:-

- 1) Dr. Alok Kole, Professor, EE and President, IIC (**Coordinator**)
- 2) Dr. Hrishikesh Bhaumik, Associate Professor, IT & Convener, IIPC (**Jt. Coordinator**)
- 3) Mr. Manas Ghosh, Assistant Professor, CA & FIC, T&P
- 4) Mr. Nirmalya Chaudhuri, Advisor, Industry Alliance
- 5) Dr. Srijan Bhattacharya, Assistant Professor & HoD, AEIE
- 6) Mr. Srikanta Acharya, Assistant Professor, ECE
- 7) Mr. Dipan Bandyopadhyay, Assistant Professor, IT

B. Technical Collaborations Sub-Committee:-

- 1) Dr. Indrajit Pan, Professor & HoD, IT & Coordinator, IQAC (**Coordinator**)
- 2) Prof.(Dr.) Debasish Mondal, Professor, EE
- 3) Dr. Arpan Deyasi, Associate Professor, ECE & Convener, NAAC
- 4) Dr. Abhishek Basu, Associate Professor, ECE & FIC, Academics
- 5) Mr. Manas Ghosh, Assistant Professor, CA & FIC, T&P

C. Program Design and Technical Sub-Committee:-

- 1) Dr. Hiranmoy Roy, Associate Professor, IT (**Coordinator**)
- 2) Dr. Arpan Deyasi, Associate Professor, ECE & Convener, NAAC (**Jt. Coordinator**)
- 3) Mr. Budhaditya Biswas, Assistant Professor, EE
- 4) Mr. Sujoy Mondal, Assistant Professor, ECE
- 5) Mr. Rajib Saha, Assistant Professor & HoD, CSE
- 6) Dr. Pramit Ghosh, Associate Professor, CA
- 7) Dr. Soumyadip Dhar, Associate Professor, IT
- 8) Mr. Arup Kumar Bhattacharjee, Assistant Professor, CSE
- 9) Mr. Anirban Dey, Assistant Professor, CSE
- 10) Mr. Subhajit Pathak, Expert Faculty, MeitY Project

D. Infrastructure, Logistics & Hospitality Management Sub-Committee:-

- 1) Mr. Soumen Mukherjee, Associate Professor, IT (**Coordinator**)
- 2) Mr. Sandip Saha, Registrar (**Jt. Coordinator**)
- 3) Mr. Arijit Majumdar, ASA
- 4) Mr. Pradip Kumar Das, Dy. Registrar & FA, SASWC
- 5) Dr. Anup Kumar Kolya, Assistant Professor, CSE
- 6) Mr. Harinandan Tunga, Associate Professor, CSE & FIC, SA & SW
- 7) Mr. Palash Ghosh, Assistant TPO
- 8) Mr. Bishal Ghosh, Assistant Professor, CSE
- 9) Mr. Dileep Kumar, TA, ECE

E. Finance Sub-Committee:-

- 1) Prof. (Dr.) Alok Koley, Professor, EE and President, IIC
- 2) Dr. Debasish Mondal, Professor, EE (**Coordinator**)
- 3) Dr. Anup Kumar Kolya, Assistant Professor, CSE
(**Jt. Coordinator**)
- 4) Mr. Harinandan Tunga, Associate Professor, CSE & FIC, SA & SW
- 5) Mr. Pradip Kumar Das, Dy. Registrar, RCCIIT and FA, SWC

F. Event Management Sub-Committee:-

- 1) Dr. Arpita Ghosh, Associate Professor, ECE (**Coordinator**)
- 2) Mr. Sarbojit Mukherjee, Assistant Professor, EE (**Jt. Coordinator**)
- 3) Mr. Soumen Mukherjee, Associate Professor, IT
- 4) Mr. Somenath Nag Choudhury, Assistant Professor, CSE
- 5) Mr. Avisheshek Paul, Assistant Professor, AEIE
- 6) Mr. Avijit Saha, Assistant Professor, ESM
- 7) Mrs. Moumita Deb, Assistant Professor, IT
- 8) Mrs. Priya Sen Purkait, Assistant Professor, CSE
- 9) Mr. Subhrajit Sinha Roy, Assistant Professor, ECE
- 10) Mr. Indronil Mazumder, Assistant Professor, IT
- 11) Mr. Dipankar Khorat, Assistant Professor, CS (Non-AICTE)

G. Invitation & Liaison Sub-Committee:-

- 1) Dr. Abhishek Basu, Associate Professor, ECE & FIC, Academics
(**Coordinator**)
- 2) Dr. Srijan Bhattacharya, Assistant Professor & HoD, AEIE (**Jt. Coordinator**)
- 3) Mr. Somenath Nag Choudhury, Assistant Professor, CSE
- 4) Mrs. Monika Singh, Assistant Professor, CSE
- 5) Ms. Naiwrita Dey, Assistant Professor, ECE
- 6) Dr. Abhijit Das, Associate Professor, IT & FiC, Alumni
- 7) Mr. Amit Khan, Assistant Professor, IT
- 8) Mr. Souvik Majumdar, Assistant Professor, CSE
- 9) Mr. Subhrajit Sinha Roy, Assistant Professor, ECE

10) Mr. Indronil Mazumder, Assistant Professor, IT

H. Publication & Media Sub-Committee:-

- 1) Dr. Soham Sarkar, Associate Professor, ECE & Convener, IRC
(Coordinator)
- 2) Dr. Indrajit Pan, Professor & HoD, IT & Coordinator, IQAC
- 3) Dr. Abhijit Das, Associate Professor, IT & FiC, Alumni
- 4) Mr. Biswanath Chakraborty, Assistant Professor & HoD, CA
- 5) Mr. Arijit Majumdar, ASA

○ **Project Implementation**

- **Guidelines for further development and deployment of Winning Projects**

GUIDELINES FOR FURTHER DEVELOPMENT AND DEPLOYMENT OF SMART BENGAL HACKATHON (SBH2023) WINNING PROJECTS

The Smart Bengal Hackathon (SBH) is envisioned to promote innovation and out-of-the-box thinking among young minds and aims to institutionalize a model for harnessing the creativity and technical expertise of millions of West Bengal students for the direct benefit of our state as well as nation. Through the Smart Bengal Hackathon 2023 (SBH2023), the Institution's Innovation Cell (MIC) tried to crowdsource solutions for improving governance and quality of life and provide young citizens with an opportunity to co-create and present innovative solutions to India's pressing needs.

Post SBH, the RCC Institute of Information Technology is committed to the further development, implementation, and deployment of SBH-winning ideas by effectively supporting the concerned ministries/departments. Hence, to initiate the development and deployment of SBH-winning ideas, the concerned Problem Statement given agency is requested to follow the guidelines indicated below.

1 Hackathons are opportunities to quickly check the feasibility of any novel idea, hence projects developed during Hackathons are usually very crude and absolutely not ready for field implementation or deployment as working

solutions. They require considerable work or development before implementation/deployment as reliable, dependable solutions.

2 Ideally, the duration for development and implementation of SBH winning project should be between 6 months to 1 year. However, the duration could be increased /decreased with the mutual consent of all the involved parties.

3 Once the Organizing committee of SBH shared the contact details of the winning teams with the concerned Problem Statement given agency, they are requested to directly initiate communication with the winning teams to discuss further development and implementation roadmap of the winning ideas.

4 Concerned Problem statement agency should request a detailed project plan from the winning team which should include implementation details, tools (software & hardware) required, expert support required along with timelines.

5 Concerned Problem statement agency should procure commercial software/hardware critical for the development and implementation of the winning project.

6 Ideally, a panel of experts may be appointed to oversee the development and deployment of the SIH-winning solution.

7 Minimum one experienced technical expert per idea/winning solution should be assigned as a 'mentor' to ensure timely progress and implementation of the project.

8 In the majority of cases, the winning team will work remotely from their college, hence effective coordination is very critical. It is highly recommended that the RCCIIT schedule regular weekly/monthly monitoring sessions with each team through available video conferencing tools along with Concerned Problem statement agency.

9 If required, an appropriate faculty member from the same institution of the winning team may be co-opted as an additional 'mentor' for better coordination on project development.

10 Additionally, written consent from the winning team's educational institution should be taken committing support (permissions and time commitments) during

the development and deployment of the project. Educational institutions will not have any financial burden in this regard.

11 In the case of software solutions, a cybersecurity expert may be engaged to ensure that the development of the winning solution is on par with the required safety standards.

12 In the case of a hardware-based product, then it is highly recommended that a 'Product Design Expert' may be regularly consulted to ensure state of an art product.

13 Concerned Problem statement agency will share quarterly status reports regarding the implementation and development of SBH-winning solutions with the RCCIIT.

INTELLECTUAL PROPERTY (IP):

The Intellectual Property (IP) of the solution resides with the students who have developed and deployed the solution post-Hackathon but the concerned Concerned Problem statement agency will have lifetime access to the solution for free. This has been done to encourage Startups to be created out of the developed solutions while also keeping in mind the interest of the involved Concerned Problem statement agency.

IMPORTANT NOTE:

- In case the solution developed by the teams is an assembly of available components, then any conflict arising due to plagiarism, IP, or copyright violations, the individuals of the concerned team will be solely responsible. Hence, the teams have been advised to use verified open-source components only and acknowledge them appropriately. RCCIIT **also get a signed declaration from all the members of the team in this regard to indemnify itself from any legal conflict.**
- In some cases, the final-year students/participants of the winning team pass out of college and proceed to higher studies or jobs, or some members of the team (due to some personal reasons) may not wish to continue with project development post-SBH, in such scenarios the respective teams have the flexibility to include new members into the team as replacements.

- **Long Distance Travel/Short Distance Travel:** SBH committee will not reimburse any travel cost for the participants. The concerned participants shall bear the travel cost even if they travel from any other district.
- **Stay: SBH organizing** committee will arrange the accommodation nearby to the venue .But the participants has to bear the accommodation cost. However the participants shall request the accommodation request to SBH committee in advance.
- **Cost Incurred during Field Visits:** Other than travel and stay, if any other cost is incurred during any field visit to collect data/field survey or to undertake user testing etc (wherever required), each person shall bear the cost.

- **Guidelines**

- **Colleges**

Note: Separate file is attached titled as Guidelines-College-SPOC

- **Schools**

Note: Separate file is attached titled as Guidelines-School-SPOC

- **Idea Template**

- **For Colleges**

Note: Separate file is attached titled as Idea-Presentation-Format-SBH2023-College

- **For Schools**

Note: Separate file is attached titled as Idea-Presentation-Format-SIH2022-School

- **Venue**

RCC Institute of Information Technology, Canal South Road,Beliaghata
Kolkata-700015,West Bengal ,India,Maharashtra 400058

- **Important Dates and Deadlines**

- Registration Deadline 28th February, 2023.
- Idea Submission Deadline 28th February, 2023.
- Shortlisted Teams Announcement 31st March.2023
- Smart Bengal Hackathon Begins 11th April,2023 for SBH Junior & 12th April, 2023 for SBH Senior

- **Rewards and Prizes**

Rewards and Prizes

All participants will be provided a certificate of participation. Top 3 teams will be awarded with prize money, exciting goodies and a certificate of excellence for SBH Junior and SBH Senior.

Winner
50,000



Certificate

First Runner Up
30,000



Certificate

Second Runner Up
20,000



Certificate

Participation Certificate



Certificate

** All the prizes and certificate will be Released Within 30 days after the event is over*

- Total cash prizes worth **INR 2,00,000** + goodies, internship opportunities for SBH Senior & SBH Junior both
- Certificate of excellence for top 3 teams
- Certificate of distinction for top 10 teams
- Certificate of participation to all teams

- **Eligibility**
 - **Colleges**
SBH SENIOR

Undergraduate and Engineering Students of Higher Education Institution

- Schools

SBH JUNIOR

Class 9th to 12th Students

- FAQs

FAQ FOR COMPANY SPOC

Q. WHAT IS SMART BENGAL HACKATHON ?

Q. WHEN WAS SMART HACKATHON STARTED ?

Q. WHAT IS NEW IN SMART BENGAL HACKATHON 2023 ?

Q. WHO CAN POSE CHALLENGE IN SBH ?

Q. CAN AN INDIVIDUAL POSE A CHALLENGE ?

Q. WHAT ARE THE FINANCIAL IMPLICATIONS ?

Q. CAN UNIVERSITY OR INSTITUTE SUBMIT PS'S UNDER SBH 2023 ?

Q. CAN A STUDENT FROM DISTANCE/PART-TIME EDUCATION PROGRAMME PARTICIPATE IN SBH 2023 ?

FAQ FOR TEAMS

Q. WHO CAN PARTICIPATE IN SBH 2023?

Q. WHAT IS THE CRITERIA OF TEAM FORMATION?

Q. WHAT IS THE ROLE OF THE COLLEGE SPOC?

Q. I AM STUDENT OF HEI PURSUING PHD. CAN I PARTICIPATE?

Q. I AM STUDENT OF CLASS 5TH. CAN I PARTICIPATE?

Q. I AM PURSUING DISTANCE/PART-TIME AND CURRENTLY ENGAGED AS A WORKING PROFESSIONAL. CAN I PARTICIPATE?

Q. WHAT IS PRIZE MONEY OF WINNING TEAM?

Q. WHEN CAN I SUBMIT THE IDEA AGAINST THE PROBLEM STATEMENT?

Q. WILL THIS HACKATHON BE ORGANISED DIGITALLY OR PHYSICALLY?

Q. WHAT ABOUT MENTORS OR HOW MANY MENTORS I CAN NOMINATE? AND WHAT IS THE MINIMUM REQUIREMENT FOR MENTOR TO MENTOR TEAM IN HACKATHON?

Q. THE INTERNAL HACKATHON NEEDS TO BE ORGANISED AT WHICH DATE & WHAT WILL BE THE PROCESS FOR ORGANISING INTERNAL HACKATHON?

Q. WHO ALL CAN SUBMIT PROBLEM STATEMENT IN THIS HACKATHON?

Q. I AM INDIVIDUAL WORKING IN XYZ PRIVATE COMPANY. CAN I SUBMIT THE PROBLEM STATEMENT OR CHALLENGES AS AN INDIVIDUAL?

○ **Contact Us**

hiranmoy.roy@rccit.org.in

arpan.dey@rccit.org.in

M:+919832244201

+919831445343