

## **BIHAR COUNCIL ON SCIENCE & TECHNOLOGY**

(GOVERNMENT OF BIHAR, DEPARTMENT OF SCIENCE & TECHNOLOGY)

IGSC-PLANETARIUM, ADALATGANJ, PATNA – 800 001

### **Call for projects under Students Project Programme**

Bihar Council on Science & Technology, Department of Science & Technology, Government of Bihar invites project proposals for the first series of Student Project Programme which will be eligible for a maximum grant of Rs. 10,000. The project team (batch) can have a maximum of four final year students of Degree/Diploma in Govt. Engineering Colleges and Govt. Polytechnics in any discipline. The proposals are to be sent by college altogether in coordination with Student Project Programme (SPP) coordinator designated by the college. The project completed in all respects with one hard and one soft copy in a CD (.pdf) in the prescribed format (which can be downloaded from website [www.bcst.org.in](http://www.bcst.org.in)) should be submitted to BCST. All particulars entered should be same as in the hard copy. Handwritten and individual projects will not be accepted. Last date of submission of projects is **16.12.2019**.

**Project Director**

Bihar Council on Science & Technology

Email : [pd@bcst.org.in](mailto:pd@bcst.org.in)

PR. 10525 (SCI & TECH) 2019-20

**बेटा-बेटी एक समान। दहेज-प्रथा करे सबका अपमान।।**



Department of Science & Technology  
Govt. of India

# BIHAR COUNCIL ON SCIENCE AND TECHNOLOGY

IGSC-Planetarium, Adalatganj, Bailey Road, Patna-800001

## STUDENT PROJECT PROGRAMME (SPP) 1<sup>ST</sup> SERIES : 2019-2020

BIHAR COUNCIL ON SCIENCE AND TECHNOLOGY invites project proposals from the final year B.Tech /Diploma Students of the Engineering Colleges/Polytechnics which will be eligible for a maximum grant of Rs 10,000 under the 1<sup>st</sup> Series of Student Project Programme (SPP). The project team (batch) can have a maximum of four final year Degree/Diploma Engg. students. The project proposals is to be sent by college altogether in coordination with SPP coordinator designated by the college. Projects submitted individually and handwritten will not be accepted. All information entered in the soft copy should be same as in the hard copy.

### ABOUT THE SCHEME:

Bihar Council on Science and Technology implements Student Projects Scheme to mobilize the talent and potential available with students for the benefit of our state. As part of this program, last year students at the UG (Engineering) / Diploma Students in their program can apply. Financial support up to Rs 10,000 / be provided to each project. Those who wish to apply for this program are requested to read the instructions carefully and apply them only in the prescribed format. The format and instructions are available on the BCST website [www.bcst.org.in](http://www.bcst.org.in).

**The project proposals may be submitted from 16th November, 2019 to 16th December, 2019**

### The submitted projects may be from any one of the branch as suggested below :

- |                            |   |                               |
|----------------------------|---|-------------------------------|
| 1. Civil Engineering       | 2. Electrical Engineering                 | 3. Mechanical Engineering     |
| 4. Electronics Engineering | 5. Electrical and Electronics Engineering | 6. Computer Science and Engg. |
| 7. Automobile Engineering  | 8. Chemical Engineering                   | 9. Information Technology     |
| 10. Textile Engineering    | 11. Ceramics Engineering                  | 12. Printing Technology       |

**Who can apply: Final year students of B.Tech/Diploma studying in Engineering College/Polytechnic of the state**

### How to apply:



- Students studying in their final year B. Tech/Diploma in Engineering are eligible to apply.
- The Project Proposals shall be prepared as per the SPP proposal format available from BCST website [www.bcst.org.in](http://www.bcst.org.in).
- The team members are advised to carry-out prior-art-search before submitting the project proposal to check the novelty of the project.
- The project team shall have a maximum of 4 students in their team and each project team shall send only one proposal.
- The filled proposal must be sent to "Project Director, Bihar Council on Science and Technology, IGSC-Planetarium, Adalatganj, Bailey Road, Patna-800001" in a sealed envelope superscribing "**Project Proposal for 1st series of Student Project Programme (SPP) – branch as applicable** .
- Kindly keep a photocopy of the completed proposal before submitting to BCST, Patna.
- After the completion of proposal, the team leader of the project needs to fill the Google Form. The link is as follows:  
[https://docs.google.com/forms/d/1Rmy\\_jmFYFgj31gJTvzTU2OqtokblY8B6qVGdTAMbiVk](https://docs.google.com/forms/d/1Rmy_jmFYFgj31gJTvzTU2OqtokblY8B6qVGdTAMbiVk)
- The project proposals to be submitted from the college with necessary attestation.
- All sanctioned project will get participation certificate.
- Top 50 selected project from the seminar and exhibition will get certificate along with cash prize of upto Rs. 5000/- each.

**Note:** Only typed project proposals to be sent by college altogether in coordination with SPP coordinator designated by the college will be accepted.

### BCST will not consider the proposals which fall in the following category.

- Computer simulation based.
- Literature surveys / Data collection based.
- Compilation of Internet downloaded information.
- Repetition of previous SPP Projects.
- Non-scientific projects.
- Case study projects.
- Non-Practical projects.
- Projects based on obsolete ideas.
- Individual proposals.

### Evaluation Process :

- The projects will be selected for sponsorship after evaluation by experts. In the second phase, the selected projects will be further evaluated and shortlisted at nodal centres for final state level seminar and exhibition.
- The amount sponsored will be sent to the Principal by cheque / NEFT.
- The selected projects shall be evaluated at all the stages, failing to which the grants will be withdrawn.

**Note:** The projects selected for Seminar and Exhibition will be exhibited at one of the Engineering College or Polytechnic in the state, wherein projects will be awarded and also selected for commercialization / prototype development.

### DATES TO REMEMBER

Last date for receipt of hardcopy of the project proposal as per the SPP proposal format	<b>16th December 2019</b>	2 Pages synopsis and Final Project Report submission along with softcopy (in .pdf format) in a CD and by Email ( <a href="mailto:spp.bcst@gmail.com">spp.bcst@gmail.com</a> )	<b>10th June 2020</b>
Project approval by BCST	<b>January 2020</b>		
Evaluation of Projects at Nodal Centre and selection of projects for Seminar / Exhibition	<b>April - June 2020</b>	Seminar and Exhibition of selected projects	<b>Last week of July 2020 or 1st Week of August 2020.</b>

For details if any, you may contact : SPP Helpdesk : 0612-2508264 | Email: [spp.bcst@gmail.com](mailto:spp.bcst@gmail.com)

This programme is supported by : SSTP, Department of Science and Technology, Government of India and Department of Science & Technology, Government of Bihar

Students must send the "hardcopy of the project proposal" with due approval of the college to:  
**The Project Director, Bihar Council on Science and Technology**  
IGSC-Planetarium, Adalatganj, Bailey Road, Patna - 800001

# Student Project Programme (SPP)

## Background

Bihar Council on Science and Technology (BCST) has decided to promote highly ambitious Student Project Programmes in a large number of educational institutions, located in Bihar, in areas of Engineering to build a strong base for practical problem solving. This scheme will help students to convert their talent and creativity through experimentation, design, fabrication and testing in reality and ultimately into business model as technical institutions have proper infrastructure facilities and well qualified teachers.

This programme has been started in 2019-20, and is a unique experiment in Bihar. This is a tribute to the foresightedness and inspiration on the part of a group of dedicated scientists, engineers and executives and administrators of Government of Bihar. The programme is also a major innovation and first of its kind in technical education in the country and will have a major impact in improving the quality of technical education through innovative ideas which is demand of the time. It links together technological developmental efforts with educational institutions so that relevant problems flow to the institutions and hopefully feasible technical solutions might flow back to the implementers.

BCST will provide financial and academic support the worthwhile project work upon the recommendation of the concerned principals.

## Objectives

- Creativity of students applied to solve development problems of our people and State through Science and Technology.
- Enrich collegiate education through finding solutions to real life problems.
- Improve understanding and develop methodology of solving complex issues.

## Issues Focused

- Several studies focused on rural issues have helped in development activities in Bihar. Dissemination of technology pertaining to low cost housing technology, ground water study, low cost agricultural implements, assessment of drinking water potential, in specific areas have been notable examples (but not limited to).
- This programme will enrich collegiate education through finding solutions to real life problems. This will also improve the understanding and development of a methodology to solve complex issues.
- This programme will utilize the services of experts from various scientific and technical institutions like Indian Institute of Technology Patna, Chandragupta Institute of Management Patna, National Institute of Technology Patna, AK Universities, TRTC and in addition to local organizations like Village Panchayats, Municipalities, Jeevika (BRPL), etc. Experts from various software companies and NIC will join hands in strengthening the quality of the SPP.

Projects sponsored by BCST through this programme will be recognized by many industries and will help the students to seek employment. This programme will utilize the tremendous talent and

potential of the students and the rich experience of engineering faculty for tackling the real life problems of people in Bihar

## **Methodology**

Each proposal will be reviewed by an expert and only those recommended will be supported by the BCST (approximately one project proposal out of four gets funded). More than one hundred senior faculty of Indian Institute of Technology, Chandragupta Institute of Management Patna, National Institute of Technology Patna Bihar, AK Universities, TRTC and in addition to local organizations like Bihar Industries Association, Village Panchayats, Block Development Boards, Municipalities, Jeevika (BRPL), etc. experts from various software companies and NIC and other experts will review the proposals. They will also provide guidelines and suggestions to make a project innovative and meaningful. A modest financial support will be provided to the student group by BCST.

On the completion of the project, a team of experts will examine the project at a nodal centre and will select the better ones for the annual Seminar and Exhibition. It will help to identify motivated faculty from the respective academic institutions and initiate interactions that could lead to even better projects.

An annual State Level Seminar and Exhibition of selected student projects (about 100 projects selected by the evaluation team of experts) will be held every year in one of the engineering colleges/polytechnic/IGSC wherein all the Principals, faculty members and students of engineering colleges and some experts from all over the country will be invited to participate. Awards for the best projects and project guides will also be given during the seminar and exhibition.

## **Students Projects Scheme of BCST**

### **1st Final Year project support**

**Closing Date:** 16-Dec-2019

**Reward: 10,000 INR**

### **About the Scheme:**

The State Council of Bihar on Science and Technology Implements Student Projects Scheme to mobilize the talent and potential available with students for the benefit of our state. As part of this programme, last year students at the UG (Engineering) / Diploma Students in their programme can apply. Financial support up to Rs 10,000 / - will be provided to each project. Those who wish to apply for this program are requested to read the instructions carefully and apply then only in the prescribed format. The format and instructions in which the proposals must be submitted are available in the website [www.bcst.org.in](http://www.bcst.org.in).



भारत सरकार  
विज्ञान और प्रौद्योगिकी मंत्रालय  
विज्ञान और प्रौद्योगिकी विभाग  
GOVERNMENT OF INDIA  
Ministry of Science and Technology  
Department of Science and Technology  
Technology Bhavan, New Mehrauli Road  
New Delhi - 110016



बिहार सरकार



## BIHAR COUNCIL ON SCIENCE AND TECHNOLOGY

### FORMAT FOR STUDENT PROJECT PROPOSAL FOR THE 1<sup>ST</sup> SERIES OF STUDENT PROJECT PROGRAMME

*(Hand written proposals will not be accepted, please fill all the details in this MS word file as per the following format and mail scan copy of completely filled project proposal along with filled up the Google Forms to spp.bcst@gmail.com)*

[https://docs.google.com/forms/d/1Rmy\\_jmfYFgj31qJTvzTU2OqtokblY8B6qVGdTAMbiVk](https://docs.google.com/forms/d/1Rmy_jmfYFgj31qJTvzTU2OqtokblY8B6qVGdTAMbiVk)

1.	<b>Name of the College:</b>
2.	<b>Project Title :</b>
3.	<b>Branch :</b>
4.	<b>Degree/ Diploma(Engg) :</b>
5.	<b>Name(s) of project guide(s) :</b> 1. Name: Prof. / Dr. / Mr. / Mrs. Email id : Contact No. :  2. Name: Prof. / Dr. / Mr. / Mrs. Email id : Contact No. :
6.	<b>Name of Team Members (Strictly not more than four students in a batch):</b> (Please paste the latest passport size photograph adjacent to your respective names)  Name: AKU/SBTE Reg. No.: Email id: Mobile No:  Name:

	<b>AKU/SBTE Reg. No.:</b> <b>Email id:</b> <b>Mobile No.:</b>  <b>Name:</b> <b>AKU/SBTE Reg. No.:</b> <b>Email id:</b> <b>Mobile No.:</b>  <b>Name:</b> <b>AKU/SBTE Reg. No.:</b> <b>Email id:</b> <b>Mobile No.:</b>
<b>7.</b>	<b>Team Leader of the Project :</b> <b>Name:</b> <b>AKU/SBTE Reg. No.:</b> <b>Email id :</b> <b>Mobile No. :</b>
<b>8.</b>	<b>Date of commencement of the Project:</b>
<b>9.</b>	<b>Probable date of completion of the project:</b>
<b>10.</b>	<b>Scope / Objectives of the project(100Words):</b>
<b>11.</b>	<b>Literature Survey (At least two/ Within Five Years) :</b>  <b>Patent Survey (Optional):-</b>
<b>12.</b>	<b>Methodology (500 Words) :</b>          <b>Note:</b> In case of fabrication work in the project, an engineering drawing with dimensions / detailed design should be attached to the proposal.
<b>13.</b>	<b>Expected Outcome of the project (200Words) :</b>

14.	<p><b>Is the project proposed relevant to the Industry or Institution? :</b>  <b>Yes / No :</b>  <b>If Yes, Please provide details of the Industry / institution and contact details :</b>          (Note: Preference will be given to those projects relevant to the industry / institution. Hence be specific in giving detailed information). Is the industry extending support - technology / funds / use the final product, please specify.</p>														
15.	<p><b>Can the product or process developed in the project be taken up for filing a Patent?</b>  <b>Yes / No :</b>  <b>Prior Art search done?</b>  <b>Yes/No :</b>  <b>Note:</b> If Yes, you may contact Patent Information Centre of BCST for more details Email : <a href="mailto:pd@bcst.org.in">pd@bcst.org.in</a></p>														
16.	<p><b>Budget details (break-up details should be given) :</b></p> <table border="1" data-bbox="424 985 1268 1518"> <thead> <tr> <th data-bbox="424 985 938 1061">Budget</th> <th data-bbox="938 985 1268 1061">Amount</th> </tr> </thead> <tbody> <tr> <td data-bbox="424 1061 938 1137">a) Materials / Consumables</td> <td data-bbox="938 1061 1268 1137">0.00</td> </tr> <tr> <td data-bbox="424 1137 938 1214">b) Labor</td> <td data-bbox="938 1137 1268 1214">0.00</td> </tr> <tr> <td data-bbox="424 1214 938 1290">c) Travel</td> <td data-bbox="938 1214 1268 1290">0.00</td> </tr> <tr> <td data-bbox="424 1290 938 1366">d) Report</td> <td data-bbox="938 1290 1268 1366">0.00</td> </tr> <tr> <td data-bbox="424 1366 938 1442">e) Miscellaneous</td> <td data-bbox="938 1366 1268 1442">0.00</td> </tr> <tr> <td data-bbox="424 1442 938 1518" style="text-align: center;"><b>Total</b></td> <td data-bbox="938 1442 1268 1518" style="text-align: center;">0.00</td> </tr> </tbody> </table>	Budget	Amount	a) Materials / Consumables	0.00	b) Labor	0.00	c) Travel	0.00	d) Report	0.00	e) Miscellaneous	0.00	<b>Total</b>	0.00
Budget	Amount														
a) Materials / Consumables	0.00														
b) Labor	0.00														
c) Travel	0.00														
d) Report	0.00														
e) Miscellaneous	0.00														
<b>Total</b>	0.00														
17.	<p><b>Any other technical details (Please specify) :</b></p>														
18.	<p><b>SPP Coordinator (Identified by the college) :</b>  <b>Note:</b> To be identified by the Principal of the institution. The project proposals must be submitted to BCST through SPP coordinator designated by the Principal.  <b>Name : Prof. / Dr. / Mr. / Mrs.</b>  <b>Email id :</b>  <b>Contact No. :</b></p>														

**(Name &Signature of Project Guide with Seal)**

**Email id:**

**Contact No.:**

**(Name &Signature of HOD with Seal)**

**Email id:**

**Contact No.:**



# **DECLARATION**

## **(From Project Students)**

We, the project team hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge and belief and we undertake to inform BCST of any changes therein in the project tile, students name will be intimated immediately. In case any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it. We hereby authorize sharing of the project information with this project proposal with the Bihar State Council on Science and Technology, Patna.

We are aware that the project team has to exhibit / demonstrate their project in the nodal centre and interact regarding project with the experts and to exhibit the project in the State Level Seminar and Exhibition (if selected). If the student team fails to attend the evaluation in nodal centre or fails to attend the State Level Seminar and Exhibition, the supported project amount will be returned back to BCST.

We also hereby, enclose the endorsement form to BCST, Patna.

**Name of the students**

**Signature with date**

- 1.
- 2.
- 3.
- 4.

# ENDORSEMENT

(From College, endorsement to be taken in the institution / Department Letter head)

This is to certify that 1) Mr. / Ms....., 2) Mr. / Ms. ....  
3) Mr. / Ms. ...., 4) Mr. / Ms. ...., are bonafide student(s) of Department of ....., in the degree program of our institution. If the project proposal submitted by these students under the **1st** series of Student Project Programme is selected by BCST, we will provide the requisite laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps to see that the project team will exhibit / demonstrate their project in the nodal centre and in the State Level Seminar and Exhibition (if selected). If the student team fails to send the completed project report or fails to attend the evaluation in nodal centre or fails to attend the State Level Seminar and Exhibition, the supported project amount will be returned back to BCST.

**(Name & Signature of  
Project Guide with Seal)**

**(Signature of HOD with Seal)**

**(Signature of the Principal  
with Seal)**

**Email id:**

**Email id:**

**Email id:**

**Contact No.:**

**Contact No.:**

**Contact No.:**