

Department of Science and Technology Ministry of Science and Technology Government of India

## **GUIDELINES** FOR ORGANIZING INTERNSHIP SCIENCE CAMPS

of

# **INSPIRE Internship** Component

Under



# Innovation in Science pursuit for Inspired Research (INSPIRE)

This document provides INSPIRE Internship implementation guidelines under the INSPIRE Scheme of the Department of Science and Technology (DST).

The Department of Science and Technology (DST) reserves the right to review and modify these guidelines as and when required.

# Guidelines

**"Innovation in Science Pursuit for Inspire Research (INSPIRE)"** is a scheme of the Department of Science & Technology for attracting young talent to science. The objective of INSPIRE scheme is to communicate to the youth population of country the excitements of creative pursuit of science and attract them to study science at an early stage and build the required critical human resource pool for strengthening and expanding the Science & Technology system and R&D base of the country.

**INSPIRE Internship** a component under INSPIRE Scheme aims to provide exposure to students who are among top one percent in their X Board Examination and pursuing science in standard XI, by organizing Science Camps either during summer or winter which provides opportunity to them to interact with Science icons from India and abroad, including Nobel Laureates, to experience the joys of scientific pursuit. These science camps nourish the curiosity of students in science, help them to think out-of-the box and attract students at an early age of 16-17 years to choose science subjects for further studies and pursue research as career.

These camps are organized at various universities/colleges/academic/research institutes within country and are residential in nature except in metropolitan cities. **Selection Criteria**: Selections to be made among the top one percent rankers in their X Board Examination and pursuing science in standard XI. **Duration of the Summer/Winter Camp**: 5 days (excluding the days of Journey)

#### **Students Eligibility Criteria**:

- a. Top one percent ranking in their X Board Examination
- b. pursuing science in standard XI and
- c. should not have attended a similar camp earlier
- d. participating students shall be from the same state or UT

**Note**: In case the number of top 1% students for a science camp is more than the allocated number of INSPIRE interns, top rankers will be selected for INSPIRE internship science camp provided they had applied for the same. The list of the cut-off percentage for various State and Central Education Boards class X examination is available at Table 1.

#### **Eligibility Criteria for INSPIRE INTERNSHIP Science Camp Organizers:**

- a. University/College or Academic/Research institute should have the required infrastructure of related Science Laboratories for holding INSPIRE Internship Science Camps.
- b. Availability of auditorium with well equipped sound system and LCD projectors.
- c. Availability of Guest House, Hostel for Girls and Boys, with requisite holding capacities.
- d. University, College or Academic/Research institute shall owe the administrative and financial responsibility for the organization of INSPIRE Internship Science Camp.
- e. Organizing institute has to provide an undertaking that they will participate in the monitoring of the camp whenever they are asked to do so. DST will provide only boarding and Lodging for attending the monitoring meeting.

#### **Role of the Science Camp Organizers:**

The Local Organizer Shall advertise/ announce the event in the local Media or approach School Principal/ Headmaster/ Headmistress to fill up the Registration Form of INSPIRE Internship (available in the Website) by the Class XI standard science students. On the availability of filled-in Registration Form, selection may be done by the Local Organization level as per the top 1% data given in the Table 1 and an invitation may be extended to the selected students for attending/ joining the respective Summer/Winter camp. For identifying the Mentors for Camps, a List of more than 3000 Mentors suggested by INSPIRE-Academy Panel is available at the Website (www.online-inspire.gov.in). Coordinator needs to identify suitable mentors for the respective camp and invite them accordingly.

The size of one such camp may be decided by the organizing institute depending upon their infrastructure facility. However, a reasonable size of one camp could be 150-200 students with proportionate number of mentors. The Organizer shall display properly the 'INSPIRE' banner etc. in the event including use of the 'INSPIRE LOGO'.

#### Mentors and their Role:

Mentors for INSPIRE Internship would be various Academy Fellows, Bhatnagar Awardees, Scientists and Academicians of National and International repute. Mentors role would be to interact with the students through lectures related to scientific success stories and joys of innovation across all science streams which in turn would nourish the curiosity of children in science, help them to think out of box and attract them at an early age of 16-17 years to enroll/pursue their academics/career in science. This will be followed by personal interaction in an exclusive set up at camp.

Mentors will be provided an "Appreciation Certificate" for their contribution in this endeavor by the host institute and Mentors will directly provide the feedback about the camp to DST through e-mail (E-mail ids: tamanna.arora@gov.in or namita@nic.in)

In addition to providing feedback to the camp organizer, mentors are free to send their independent feedback to Head, INSPIRE on email: <u>namita@nic.in</u>

#### Submission of Proposal:

Any public or private funded University or College or Academic/Research Institute fulfilling the above eligibility criteria and willing to organize INSPIRE internship science camp, can submit online proposal on the <u>www.online-inspire.gov.in</u> three months in advance from the proposed date of organization of the event for consideration of support. The proposal shall be having Endorsement Letter duly signed by the Head of the Institute, Zero Balance Subsidiary Account in the Bank of Maharashtra of the respective Institute along with the PFMS Unique Agency code. Camp coordinator shall have to be the regular employee of respective University or College or Academic/Research Institute. Duly signed Mandate Form in prescribed format also to be submitted along with budget estimate.

#### **Schedule of the Program:**

Each day the schedule of the program should comprise of at least two lectures cum discussion of one and a half hour in the first half of the day (i.e., 0930Hrs to 1300hrs) followed by hands on experience in the second half (i.e., 1400Hrs to 1730hrs). Since the camps are residential in nature, coordinator should engage students in the thinking process on the issues of national importance by way of organizing sessions of interns for writing on new and innovative ideas. The following are some indicative areas:

- ✤ Agriculture and Food Security
- Energy Science and Green technologies
- ✤ Clean energy
- Climate Change and Natural Resources Rejuvenation/utilization
- Make in India
- Swachh Bharat
- Personalized Health care: Prevention and Control
- Digital Services including Artificial Intelligence and Machine Learning
- Pollution and its control
- ✤ Waste Management and Garbage Disposal

Program Coordinator can organize pre-dinner interactive session with the students on the first day and initiate the discussions about the role of science and technology in the development of nation. Out of 5 days of camp on  $2^{nd}$  or  $3^{rd}$  day the camp organizer shall organize a session with the participating interns on writing the new and innovative ideas on the above areas. Organizer shall evaluate the idea write ups through the external mentors present during the  $4^{th}$  or  $5^{th}$  day and select the best ten write-ups in the raking of  $1^{st} 2^{nd} 3^{rd} \dots 10^{th}$ . The interns whose write-ups will be selected for  $1^{st} - 10^{th}$  rank will be awarded during the valedictory function. Program coordinator has to submit these ten write-ups in soft Copy to DST immediately after the completion of science camp as well as along with completion report.

Considering the queries raised by the camp organizer to have Nobel Laureate participation in more camps, it is agreed that each visiting Nobel Laureate has to interact with the students of two camps, if the camps are being organized during the same period. This will help in more number of INSPIRE Interns interacting with the Nobel Laureate.

#### **Important Instructions to the Camp Organizers:**

- > Pre-dinner Discussion of INSPIRE interns with Mentors may be arranged each day.
- > The proposal should include a minimum of three mentors for each subject.
- The lecture schedule should be planned with the consideration of incorporating lectures from two subjects on the same day.
- Interns participating in hands-on experiments should be grouped into batches with a maximum size of 25-30 interns per batch.

- Practical Schedule and Manual to be covered during the INSPIRE Internship science camp may be included in the application along with the programme schedule.
- > Full day visit for Museum, Science parks, Planetarium etc. should be avoided as far as possible.
- Half a day visit to the Research Institutes/Labs. or Industry for exposure of the students to the available research facilities is permissible during the 5 days of INSPIRE Internship Science Camps.
- Attendance sheet for each day (Signature only) of the participants should be submitted with the report.
- In case, if change of date/duration of the Sanctioned camp is required it is mandatory to seek the approval from DST for the same before the Camp organization.
- Confirmed mentor list should not be changed by more than thirty percent and the replacement should be only with equal level mentors. Approval of DST needs to be sought on the changed mentor list if the change is more than 30% at least one week in advance to the commencement of the INSPIRE Internship science camp.
- Participating number of students in a camp should be equal to the sanctioned strength, if number is less, funds should be incurred at pro rate basis and if the number of students is above the sanctioned number, no additional funds will be provided for the same, unless until prior approval from DST is obtained.
- Camp duration is 5 days excluding the days of journey.
- Proposal should be submitted online minimum three months prior to the proposed date of commencement of camp.
- Organizer shall not organize INSPIRE Internship science camp in case of non-receipt of 1<sup>st</sup> installment of grant. Only on receipt of grant, a science camp shall be organized.
- Organizing institute has to provide an undertaking that they will participate in the yearly monitoring meeting of the camp whenever they are asked to do so. DST will provide only boarding and Lodging for attending the monitoring workshop/meeting. TA for attending the workshop shall not be provided. It may be adjusted by the camp organizer in the grant released to organize the next INSPIRE Internship Science Camp if sanctioned.

#### Financial support for the program:

For the INSPIRE Internship camp of 5 days (excluding the journey days), Rs. 7000/- student (as an upper most ceiling/student) will be provided to the coordinating Institute/Department/Agency to meet the INSPIRE Internship Science camp cost. This cost includes travelling cost (as per entitlement & actual) for the Students and Indian Mentors, Boarding & Lodging, Stationary including Books & small experimental gadgets etc., Consumables, Honorarium (to the Mentors etc.) and organizational expenses. Honorarium to the mentors should be paid maximum @ Rs.4000/- per contributing day, with an upper limit of Rs.8000/- per mentor if the mentor contributes for more than one day in the entire camp duration. For inviting a Nobel Laureate to interact with the students in these camps as an International Mentor, a grant of maximum of Rs 10 lakh (all inclusive) per Nobel Laureate shall be provided. Every year, maximum 50 no. of Nobel Laureates can be invited for the INSPIRE Internship Science Camps.

#### **Report Submission to DST:**

INSPIRE Internship Science Camp Completion Report should be submitted on external hard disc

covering the following:

- a. Soft copy of the online submitted application along with uploads including the Endorsement certificate from the Head of Institute, Program Schedule etc. along with the declaration that the organized INSPIRE Internship science camp was residential in nature.
- b. Student's attendance (signature only) for each day (5 Days)
- c. Each Student Registration Forms
- d. Each Student Feedback Forms
- e. One Page Student Feedback Summary (Compiled by the Program Coordinator in the prescribed Format)
- f. Course coordinators feedback
- g Video-graphy of the five days' program.
- h List of students with cut off marks, address and signature.
- i List of Mentors along with the schedule as followed by the organizers along with the title of the talks/interaction carried each day by the mentors.
- j. Practical session details followed in the camp.
- k Scientific and technical write-ups of 1<sup>st</sup>, 2<sup>nd</sup> 3<sup>rd</sup> .....10<sup>th</sup> top rankers.
- 1 Audited Utilization Certificate and Statement of Expenditure (2 Copies) needs to be submitted in DST format (Performa 12A) only within two months of the event completion date.

### **Brief Report of Camp:**

A brief report on Internship Science Camp after completion covering the following has to be submitted on INSPIRE Web portal:

- Sanction Order copy
- Any change in date if happened and approved by DST
- List of the participating students with cutoff marks, their State/Central Education Board, CBSE, ICSE etc.
- Five days attendance of the students
- List of Mentors with their contact details and title of the talk
- Program schedule followed in the camp
- Student feedback summary in the given format (compiled by the Program Coordinator in the provided proforma on INSPIRE website)
- Program Coordinators Feedback
- Innovative idea write-ups of the top ten winners
- Audited Utilization Certificate in GFR 2017, 12A Performa
- Statement of Expenditure
- Residential Camp certificate

#### Report to be retained by the Program Coordinator:

1. A soft and Hard copy of the Report submitted to the DST should be retained by the organizing Institute for their record.

2. Also, Registration and Feedback forms duly filled in by the participating students including a photograph of the student, identity proof, cut off marks, courses pursued in the XI standard and a declaration that he/she has not attended a similar camp earlier needs to be retained by Camp Organizer.

#### Table - 1

#### State & Central Boards Top 1% Percentage Cut-off Marks in class X Year 2023– Eligible to participate in the INSPIRE Internship Camps

Sl. No.	Name of Board	CGPA/Top 1% Percentage Cut-off Marks
1.	Andhra Pradesh	96.83
2.	Assam	88.67
3.	Bihar	86.40
4.	Chhattisgarh	89.33
5.	Goa	95.33
6.	Gujarat	89.33
7.	Haryana	94.6
8.	Himachal Pradesh	95.71
9.	Jammu & Kashmir, Ladakh	98
10.	Jharkhand	90.60
11.	Karnataka	96.64
12.	Kerala	98.62
103.	Madhya Pradesh	91.6
14.	Maharashtra	93.40
15.	Manipur	89
16.	Meghalaya	81.50
17.	Mizoram	86.8
18.	Nagaland	93.67
19.	Orissa	88.33
20.	Punjab	94
21.	Rajasthan	92.33
22.	Telangana	Data Awaited
23.	Tamil Nadu	95.6
24.	Tripura	91.20
25.	Uttar Pradesh	88.83
26.	Uttarakhand	89.40
27.	West Bengal	90.71
28.	CBSE	96.0
29.	ICSE	97.83
30.	Viswa-Bharathi	97.44
31.	AMU Board	96.40
32.	Banasthali Vidyapith Board	96.75

Marks obtained [#% - Marks = \_\_\_\_\_X 100] Maximum Possible Marks

\*\*\*\*\*