

Government of West Bengal  
Department of Science & Technology and Biotechnology (DSTBT)  
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1  
Salt Lake, Kolkata-700064

Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): **Seminar**
2. Title of the proposed Programme: **2-day seminar on Intelligent Transportation: Concepts, Applications, and Future Directions**
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community): **College Faculty and College Students**
4. Duration (days): **02 days** Tentative Dates of the proposed Programme: **17<sup>th</sup> March (Tuesday), 2026 to 18<sup>th</sup> March, 2026 (Wednesday)**
5. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): **Attach as annexure III**
6. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary):

**Name: Prof. (Dr.) Chandan Banerjee**

**Designation: Professor**

**Postal Address: Netaji Subhash Engineering College, Police Para, Garia, Kolkata-700152.**

**Mobile no: 9830127266**

**Email id: chandan.banerjee@nsec.ac.in**

7. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ ITI/ Autonomous body/ registered NGO/ Trust etc.): **Institute**
8. Date wise detail Programme Schedule (attach separate sheet, if necessary): **Attach as annexure IV**
9. Collaborating Institutions/ Organizations, if any, with their specific contribution: **NA**
10. Expected number of participants and list of Resource Persons/ Invited Speakers:

**Number of participants : 50**

**Resource Persons: 05**

11. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc.: **NA**

12. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant:

**Name and Address of the authority : Netaji Subhash Engineering College**

**Responsible person: Prof. (Dr.) Chandan Banerjee**

13. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):

**D : Rs. 1,35,000/- = (A: 1,50,000/- - B: 15,000/- - C:0 )**  
(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: YES
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Lt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): NA
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc. List of recommended beneficiaries: NA

DECLARATION

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature: *Chandan Banerjee*

Date: 15/12/2025

Name of Programme Coordinator: Prof. (Dr) Chandan Banerjee

Designation: Professor

Address: Netaji Subhash Engineering College, Police Para,  
Garia, Kolkata-700152.

Signature: *Ghosh*

Date: 15/12/2025

Name of Head of the Institution: Prof. Kumar Ghosh

Designation: Principal, Netaji Subhash Engineering College

Address: Netaji Subhash Engineering College,  
Police Para, Garia, Kolkata-700152.

(Office Seal)

RECOMMENDATION  
(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and I/ we recommend the said proposal for getting grant-in-aid from DSTBT, Govt. of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

Address:

(Office Seal)

Annexure-I

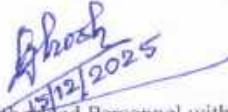
Proposed Total Budget with break-ups

A. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	25,000/-
2.	Study materials, Consumables expenses	20,000/-
3.	Hall rent, if any	20,000/-
4.	Publicity materials	8,000/-
5.	Travel expenses	10,000/-
6.	T.A. to the external Resource Persons/ Experts	5,000/-
7.	Documentation expenses including audiovisual	8,000/-
8.	Light refreshments	40,000/-
9.	Auditors' fee	8,000/-
10.	Other expenses, if any (please specify)	6,000/-
Grand Total Expenditure (Rs.):		1,50,000/-

Please mention:

B. Institution/ Organization Contribution\* in Rs.15,000/-  
C. Contribution from any other sources (with name & Address) in Rs.0 (NA)  
D. Grant expected from DSTBT (Rs.) = (A-B-C) = Rs. 1,35,000/-

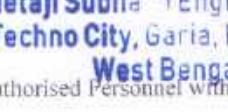
  
Signature of Authorized Personnel with seal

If C= 0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other sources

**PRINCIPAL**

**Netaji Subhas Engineering College**  
**Techno City, Garia, Kolkata-700152**  
**West Bengal, India**

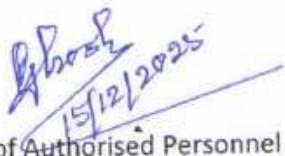
  
Signature of Authorised Personnel with seal

\*At least 10% of the total budget contribution from the Institute/ Organization is desirable.

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number & Name of the Account holder/Organisation	1431012100000012
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	9830127266
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J

  
Signature of Authorised Personnel with seal  
15/12/2025

**PRINCIPAL**  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

## Annexure III

### Objectives of the Seminar:

- To provide insights into the latest advancements in Intelligent Transportation Systems (ITS).
- To explore the role of AI, machine learning, and data analytics in transportation.
- To understand real-world applications and case studies of ITS.
- To encourage research and innovation in the domain of smart transportation.

### Proposed Topics of the Seminar:

- Introduction to Intelligent Transportation Systems
- Smart Traffic Management and Optimization
- Autonomous Vehicles: Challenges and Innovations
- AI and Machine Learning in Traffic Prediction
- IoT Integration in Smart Transportation
- Real-Time Data Analysis for Transport Efficiency
- Cyber Security Challenges in Intelligent Transportation
- Case Studies and Future Trends

### Expected Outcomes:

- Enhanced understanding of intelligent transportation concepts and technologies.
- Knowledge of cutting-edge research and development in the field.
- Skills to implement AI-driven solutions in transportation.
- Increased collaboration and research opportunities among participants.



## Annexure IV

**FDP Thrust Area: Idea, Creativity and Innovation**

**FDP Title: Intelligent Transportation: Concepts, Applications, and Future Directions in Smart Traffic**

**Start Date: 17<sup>th</sup> March (Tuesday), 2026**

**End Date: 18<sup>th</sup> March, 2026 (Wednesday)**

Day 1	Day 2
<b>10.30 am to 11am</b> <b>Inaugural Session</b>	<b>Session 3 (10.30 am to 12 noon)</b> <b>Topic: Federated learning based privacy preserving intelligent transportation</b> <b>Name of the Expert:</b> <b>Prof.(Dr.) Debasish De</b> <b>Designation &amp; Organization:</b> <b>Professor, Maulana Abul Kalam Azad University</b> <b>Years of Exp:20 years</b>
<b>Session 1 (11AM to 12.30 PM)</b> <b>Topic: Blended Mobility for Smart Delivery: Truck-Drone Synergy in the Cityscape</b> <b>Name of the Expert:</b> <b>Dr. Sunirmal Khatua</b> <b>Designation &amp; Organization:Assistant Professor, University Of Calcutta</b> <b>Years of Exp:20 years</b>	<b>Session 4 (12 noon to 1pm)</b> <b>Topic: Stream Reasoning for Smart Transportation</b> <b>Name of the Expert: Mr. Snehasish Banerjee</b> <b>Designation &amp; Organization: Lead Research Scientist at TCS Research, visiting faculty, IIT-Guwahati</b> <b>Years of Exp:15 + years</b>
<b>Lunch 12.30pm to 2pm</b> <b>Session 2 ( 2pm to 3.30pm)</b> <b>Topic:AI powered road anomaly detection system</b> <b>Name of the Expert: Prof.(Dr.) Sarbani Ghosh</b> <b>Designation &amp; Organization: Professor, Jadavpur University</b> <b>Years of Exp:22 years</b>	<b>Lunch 1pm to 2pm</b> <b>Session 5 ( 2pm to 3.30pm)</b> <b>Topic: EV to EV charge sharing in Intelligent Transportation Systems</b> <b>Name of the Expert: Prof.(Dr.) Punyasha Chatterjee</b> <b>Designation &amp; Organization: Professor and Director at School of Mobile Computing &amp; Communication, Jadavpur University</b> <b>Years of Exp: 15 years</b>
	<b>3.30pm to 4.00pm</b> <b>Valedictory Session</b>



15/12/25  
 Banerjee  
 Netaji Subhash College  
 Jadavpur  
 Banerjee  
 GD - IT, Netaji Subhash  
 Engg College

Government of West Bengal  
Department of Science & Technology and Biotechnology (DSTBT)  
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1  
Salt Lake, Kolkata-700064

Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): **Workshop**
2. Title of the proposed Programme: **Space Technology & its application**
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community): **Faculty and students of college**
4. Duration (days): **2 days**; Tentative Dates of the proposed Programme: **6<sup>th</sup> and 7<sup>th</sup> April, 2025**
5. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): **ANNEXURE - III**
6. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary):

**Name: Dr. Malay Kanti Naskar**

**Designation: Assistant Professor**

**Postal Address: Mechanical Engineering Department, Netaji Subhash Engineering College, Pachpota, Police Para, Garia, Kolkata – 700152,**

**Mobile No – 7980522169, E-mail id – malayk.naskar@nsec.ac.in**

7. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ IT// Autonomous body/ registered NGO/ Trust etc.): **Trust**

8. Date wise detail Programme Schedule (attach separate sheet, if necessary): **ANNEXURE - IV**

9. Collaborating Institutions/ Organizations, if any, with their specific contribution: **Netaji Subhash Engineering College**

10. Expected number of participants and list of Resource Persons/ Invited Speakers:  
**Expected number of participants: 50**

**Number of Resource Persons: 5**

11. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc: **NOT APPLICABLE**

12. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant: **Netaji Subhash Engineering College**

**Responsible person: Dr. Malay Kanti Naskar,**

13. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):

**D : Rs 126000 = (A: Rs 140000 ..B: Rs 14000 C: Rs 0 )**

(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: YES/NO : YES
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): YES/NO: YES
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: YES/NO: YES

DECLARATION

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature: *Malay Kanti Naskar*

Date: 15/12/2025

Signature:

*Phatak*  
15/12/2025

Date: 15/12/2025

**PRINCIPAL**

**Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India**

Name of Programme Coordinator: Dr. Malay Kanti Naskar

Name of Head of the Institution:

Designation: Assistant Professor

Designation:

Address: Netaji Subhash Engineering College, Garia,  
Kolkata - 700152

Address:

(Office Seal)

RECOMMENDATION  
(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and 1/ we recommend the said proposal for getting grant-in-aid from DSTBT. Govt. of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

(Office Seal)

Address:

## Proposed Total Budget with break-ups

## A. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	30000
2.	Study materials, Consumables expenses	20000
3.	Hail rent, if any	10000
4.	Publicity materials	10000
5.	Travel expenses	5000
6.	T.A. to the external Resource Persons/ Experts	10000
7.	Documentation expenses including audiovisual	10000
8.	Light refreshments	25000
9.	Auditors' fee	10000
10.	Other expenses, if any (please specify)	10000
Grand Total Expenditure (Rs.):		140000

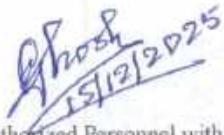
Please mention:

- B. Institution/ Organization Contribution\* in Rs. 14000
- C. Contribution from any other sources (with name & Address) in Rs. 0
- D. Grant expected from DSTBT (Rs.) = (A-B-C) 126000

Signature of Authorized Personnel with seal

If C=0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other source.

  
**PRINCIPAL**  
**Netaji Subhash Engineering College**  
**Techno City, Garia, Kolkata-700152**  
**West Bengal, India**

Signature of Authorised Personnel with seal

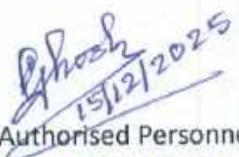
\*At least 10% of the total budget contribution from the Institute/ Organization is desirable.

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number &	1431012100000012
Name of the Account holder/Organisation	
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	7980522169
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J

Signature of Authorised Personnel with seal

  
**PRINCIPAL**  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700 152  
West Bengal, India

## ANNEXURE - III

### Workshop Proposal

#### Title: Space Technology and its Applications

#### **A. Introduction**

Space technology represents one of the most dynamic and rapidly advancing frontiers of modern science, integrating diverse fields such as satellite engineering, launch vehicle development, remote sensing, propulsion systems, artificial intelligence, and space robotics. It plays a pivotal role not only in deep-space exploration but also in solving real-world challenges related to communication, navigation, environmental monitoring, and national security.

India has emerged as a global leader in cost-effective and innovative space missions under the Indian Space Research Organisation (ISRO). Milestones such as **Chandrayaan-3**, which accomplished a historic soft landing near the lunar south pole, and **Aditya-L1**, India's first dedicated solar observatory, symbolize the nation's growing scientific capabilities and visionary approach to space science. These successes support the national vision of **Viksit Bharat@2047**, which emphasizes technological self-reliance, global leadership, and sustainable development.

In this context, the workshop aims to introduce students to the transformative power of space technology. By providing hands-on exposure to satellite data interpretation, GIS applications, remote sensing tools, and basic space system design, the workshop bridges theoretical knowledge with practical problem-solving. Students will explore how space-based applications are revolutionizing sectors such as agriculture (crop monitoring, soil analysis), disaster management (flood/forest fire mapping), weather forecasting, telecommunications, urban planning, and defense surveillance.

#### **B. Objectives**

- 1) Introduce foundational and emerging concepts in space technology, covering key systems such as satellites, launch vehicles, propulsion, remote sensing, and robotics, while also familiarizing students with **2025 global trends** like AI-enabled satellite

autonomy, reusable launch systems, in-space manufacturing, and miniaturized payload technologies.

- 2) **Demonstrate real-world applications of space-based solutions** through interactive case studies, hands-on simulations, and scenario-based learning modules. Students will explore practical uses in **precision agriculture, climate monitoring, disaster response, telecommunications, geospatial intelligence, and defense applications**.
- 3) **Develop practical skills in satellite data interpretation and analysis**, enabling students to work with platforms such as Bhuvan, Google Earth Engine, and open-source GIS tools. The workshop will also introduce **basic model rocketry, payload design principles, and sensor integration**, providing a foundational understanding of space engineering.
- 4) **Encourage innovation and entrepreneurship** by guiding students to conceptualize ISRO-inspired mini projects and prototype ideas.
- 5) **Promote interdisciplinary problem-solving** by integrating knowledge from mechanical engineering, electronics, computer science, and environmental systems, motivating students to develop solutions aligned with national missions like **Viksit Bharat@2047** and **Atmanirbhar Bharat**.

## C. Detailed Topics

### Day 1: Fundamentals of Space Technology and Earth Applications

#### 1. Satellite Systems and Orbits

- Overview of satellite architecture: payload, bus, power systems, communication modules.
- Types of orbits: **LEO, MEO, GEO, HEO**, their advantages, mission profiles, and current Indian satellites in each category.
- **GNSS Technologies:** Introduction to **NavIC**, global GNSS interoperability, accuracy improvement techniques.
- Communication satellites: GSAT series, Ku/Ka-band usage, satellite transponders.

#### 2. Remote Sensing & Earth Observation

- Principles of electromagnetic spectrum and sensor technologies (optical, thermal, microwave).

- Overview of **IRS (Indian Remote Sensing)** satellite series and data acquisition mechanisms.
- Applications:
  - ✓ Precision agriculture (crop health, soil moisture, yield estimation)
  - ✓ Urban planning & smart cities
  - ✓ Climate change assessment, forest cover mapping, glacier studies

### 3. Disaster Management Applications

- Predictive modelling for **floods, cyclones, landslides, and earthquakes** using geospatial data.
- Use of **Synthetic Aperture Radar (SAR)** for all-weather, day-night monitoring.
- Real case studies: Kerala floods, Fani cyclone early alerts, Uttarakhand disaster mapping.

### 4. Hands-on Session: QGIS-Based Satellite Imagery Analysis

- Importing IRS/Landsat/Sentinel datasets
- NDVI/NDWI calculation
- Land use–land cover classification
- Map generation for reporting

## Day 1 Afternoon: Advanced Communication and Navigation Systems

### 5. Space-Based Communication Technologies

- Evolution from INSAT to GSAT high-throughput satellites
- Role of satellite networks in **5G/6G backhauling**
- Direct-to-device (D2D) satellite communication
- Low-Earth-orbit constellations: comparison with Starlink and OneWeb

### 6. Navigation and Positioning Applications

- How GAGAN improves GPS accuracy through ionospheric correction
- Use cases:
  - ✓ Precision farming

- ✓ UAV swarms
- ✓ Autonomous vehicles and maritime navigation
- ✓ Aviation safety (runway guidance)

## 7. Case Study

- India's satellite internet revolution
  - ✓ Bharati-backed OneWeb
  - ✓ ISRO's support in launches
  - ✓ Impact on bridging rural digital divide

## Day 2: Space Exploration and Emerging Technologies

### 8. Launch Vehicles and Propulsion Systems

- Evolution of Indian launchers: **SLV** → **ASLV** → **PSLV** → **GSLV** → **LVM3**
- Cryogenic engines vs. semi-cryogenic engines
- Reusable launch systems: global comparison with SpaceX, Blue Origin, ISRO's RLV-TD
- Propulsion types: chemical, electric, hybrid, and solar electric propulsion

### 9. Space Robotics and Orbital Debris Management

- Planetary rovers (Pragyan), robotic arms, manipulator systems
- Technologies for satellite servicing and refuelling
- Active debris removal concepts: nets, harpoons, drag sails, laser-based deorbiting

### 10. Future Trends in Space Technology

- **In-space manufacturing:** 3D printing habitats, alloys, biological tissues in microgravity
- **Quantum communication** via entanglement-based secure links
- **Space-based solar power (SBSP)** systems
- Ultra-small satellites & AI-driven satellite constellations

## ANNEXURE -IV

### Date wise detail Programme Schedule

<b>Day 1: 6th April 2025</b>			
<b>Time</b>	<b>Session Title</b>	<b>Topics Covered</b>	<b>Duration</b>
10:00 AM – 10:15 AM	Inauguration & Welcome	Introduction, workshop overview	15 min
10:15 AM – 11:15 AM	1. Satellite Systems and Orbits	Satellite architecture; LEO/MEO/GEO/HEO; NavIC GNSS; GSAT communication satellites	1 hr
11:15 AM – 12:15 PM	2. Remote Sensing & Earth Observation	EM spectrum; sensor types; IRS series; applications in agriculture, urban planning, climate studies	1 hr
12:15 PM – 1:00 PM	3. Disaster Management Applications	Flood/cyclone/landslide modelling; SAR technology; case studies (Kerala floods, Fani, Uttarakhand)	45 min
1:00 PM– 2:00 PM	Lunch Break	—	1 hr
2:00 PM– 3:15 PM	4. Hands-on Training: QGIS	Importing datasets; NDVI/NDWI; LULC classification; map generation	1 hr 15 min
3:15 PM – 4:00 PM	5. Space-Based Communication Technologies	INSAT → GSAT; 5G/6G via satellites; D2D communication; Starlink & OneWeb comparison	45 min
4:00 PM – 4:40 PM	6. Navigation & Positioning Applications	GAGAN accuracy; precision farming; UAVs; autonomous vehicles; aviation	40 min
4:40 PM – 5:00 PM	7. Case Study	India's satellite internet revolution; OneWeb; ISRO's role; rural connectivity	20 min
<b>Day 2: 7th April 2025</b>			
<b>Time</b>	<b>Session Title</b>	<b>Topics Covered</b>	<b>Duration</b>
10:00 AM – 11:00 AM	8. Launch Vehicles & Propulsion	SLV–ASLV–PSLV–GSLV–LVM3; cryogenic vs semi-cryogenic; reusable	1 hr

		rockets; propulsion types	
11:00 AM – 11:45 AM	9. Space Robotics & Debris Management	Rovers; robotic arms; satellite servicing; debris removal technologies	45 min
11:45 AM – 12:30 PM	10. Future Trends in Space Tech	In-space manufacturing; quantum comms; SBSP; AI-driven constellations	45 min
12:30 PM – 1:00 PM	11. Rocketry Hands-on Prep	Basics of aerodynamics, thrust, stability	30 min
1:00 PM – 2:00 PM	Lunch Break	—	1 hr
2:00 PM – 3:00 PM	11 (Continued). Model Rocketry & Simulation	Rocket building; trajectory simulation; recovery systems	1 hr
3:00 PM – 3:40 PM	12. Defense & National Security Applications	RISAT/GISAT surveillance; missile tracking; hypersonic tech; dual-use applications	40 min
3:40 PM – 4:10 PM	13. Commercial Space Ecosystem	Skyroot, Agnikul, Bellatrix, Dhruva Space; NewSpace opportunities; future industries	30 min
4:10 PM – 4:40 PM	14. Group Innovation Activity	Startup idea pitch; prototype concepts; DST NIDHI funding pathways	30 min
4:40 PM – 5:00 PM	15. Special Guest Lecture & Valediction	ISRO/DRDO expert session on Gaganyaan & space careers	20 min

Government of West Bengal  
Department of Science & Technology and Biotechnology (DSTBT)  
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1  
Salt Lake, Kolkata-700064

Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): Seminar.....
2. Title of the proposed Programme: **Health & Hygiene**.....
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community):  
**College Students**.....
4. Duration (days): 2..... ; Tentative Dates of the proposed Programme: **12/3/26 & 13/3/26**
5. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary):  
**Annexure 3** .....
6. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary):  
**Name: Prof. Tarak Das**  
**Designation: Assistant Professor**  
**Postal Address: Netaji Subhash Engineering College , Garia, Panchpota, kol-700152**  
**Mobile No. 9836358261**  
**Mail ID: tarak.das@nsec.ac.in**  
.....
7. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ IT!/ Autonomous body/ registered NGO/ Trust etc.): **Institute** .....
8. Date wise detail Programme Schedule (attach separate sheet, if necessary): **Annexure 4**
9. Collaborating Institutions/ Organizations, if any, with their specific contribution: **Not Applicable**  
.....
10. Expected number of participants and list of Resource Persons/ Invited Speakers: .....  
**Expected number of participants: 50**  
**Resource Person: 4**  
.....
11. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc.: **Not Applicable** .....
12. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant:

**Name and Address of the authority: Netaji Subhash Engineering College**

Responsible Person: Prof. Tarak Das

13. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):

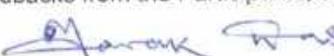
D: 117000 = (A: 130000 B: 13000 C:0.00)  
(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head:  YES/NO
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., JLBDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held):  YES/NO
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries  YES/NO

DECLARATION

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

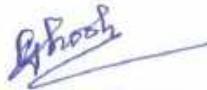
Signature: 

Date: 15.12.2025

Name of Programme Coordinator: Prof. Tarak Das

Designation: Assistant Professor

Address: Netaji Subhash Engineering College, Garia, Panchpota, kol-700152

Signature: 

Date: 15.12.2025

Name of Head of the Institution: Amal Kr. Ghosh

PRINCIPAL

Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152

West Bengal, India

Designation: Professor

Address: Netaji Subhash Engineering College, Garia, Panchpota, kol-700152

(Office Seal)

RECOMMENDATION

(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and 1/ we recommend the said proposal for getting grant-in-aid from DSTBT, Govt. of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

(Office Seal)

Address:

Annexure-I

Proposed Total Budget with break-ups

A. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	30000
2.	Study materials, Consumables expenses	20000
3.	Hail rent, if any	nil
4.	Publicity materials	10000
5.	Travel expenses	5000
6.	T.A. to the external Resource Persons/ Experts	8000
7.	Documentation expenses including audiovisual	7000
8.	Light refreshments	38000
9.	Auditors' fee	7000
10.	Other expenses, if any (please specify)	5000
Grand Total Expenditure (Rs.):		130000

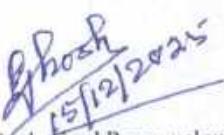
Please mention:

- B. Institution/ Organization Contribution\* in Rs.13000
- C. Contribution from any other sources (with name & Address) in Rs. 0.00
- D. Grant expected from DSTBT (Rs.) = (A-B-C) = 117000

Signature of Authorized Personnel with seal

If C= 0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other sources

  
Signature of Authorized Personnel with seal

**PRINCIPAL**  
**Netaji Subhash Engineering College**  
**Techno City, Garia, Kolkata-700 152**  
**West Bengal, India**

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number &	1431012100000012
Name of the Account holder/Organisation	
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	9836358261
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J

Signature of Authorised Personnel with seal

PRINCIPAL  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India



15/12/2025

### **Annexure-3**

#### **Aim of the Seminar:**

The aim of the one-day seminar on Health & Hygiene is to sensitize college students to the importance of maintaining good physical, mental, and environmental health by promoting awareness, knowledge, and positive attitudes toward hygienic practices and healthy lifestyles, enabling them to lead a productive and disease-free life.

#### **General Objectives of the Seminar:**

1. To create awareness about the importance of health and hygiene in daily life.
2. To improve understanding of personal hygiene practices and their role in disease prevention.
3. To promote healthy lifestyle habits, including balanced diet and regular physical activity.
4. To develop awareness about mental health, stress management, and emotional well-being.
5. To educate students on cleanliness, sanitation, and safe living environments.
6. To increase knowledge of communicable and non-communicable diseases and preventive measures.
7. To encourage healthy habits related to sleep, posture, and screen-time management.
8. To build awareness about environmental hygiene and sustainable practices.
9. To motivate responsible health-related decision-making among students.
10. To inspire adoption of lifelong health and hygiene practices for overall well-being and productivity.

#### Annexure-4

#### Date Wise Detail Program Schedule

<b>Day 1</b>	
<b>10:00 am – 10:30 am</b>	<b><i>Registration</i></b>
<b>10:30 am – 11:00 am</b>	<b><i>Inaugural Session</i></b>
<b>11:00 am – 11:30 am</b>	<b><i>Tea Break</i></b>
<b>11:30 am – 1:00 pm</b>	<b>Lecture 1: Importance of Personal Health and Hygiene</b> <ul style="list-style-type: none"> <li>• Concepts of personal hygiene</li> <li>• Hand hygiene, oral care, skin care, and sanitation</li> <li>• Impact of hygiene on academic and social life</li> </ul>
<b>1:00 pm – 2:00 pm</b>	<b><i>Lunch Break</i></b>
<b>2:00 pm – 3:30 pm</b>	<b>Lecture 2: Nutrition and Healthy Lifestyle Practices</b> <ul style="list-style-type: none"> <li>• Balanced diet and nutritional requirements</li> <li>• Physical activity and fitness</li> <li>• Sleep hygiene and lifestyle disorders</li> </ul>
<b>3:30 pm – 5:00 pm</b>	<b>Lecture 3: Communicable Diseases and Preventive Measures</b> <ul style="list-style-type: none"> <li>• Common communicable diseases among students</li> <li>• Modes of transmission</li> <li>• Vaccination, immunity, and preventive strategies</li> </ul>
<b>Day 2</b>	
<b>10:30 am – 12:00 Noon</b>	<b>Lecture 4: Mental Health and Stress Management</b> <ul style="list-style-type: none"> <li>• Academic stress and emotional well-being</li> <li>• Anxiety, depression, and coping mechanisms</li> <li>• Time management and relaxation techniques</li> </ul>
<b>12:00 Noon – 12:30 pm</b>	<b><i>Tea Break</i></b>
<b>12:30 pm – 2:00 pm</b>	<b>Lecture 5: Environmental Hygiene and Sustainable Practices</b> <ul style="list-style-type: none"> <li>• Clean surroundings and waste management</li> <li>• Water and air hygiene</li> <li>• Role of students in environmental protection</li> </ul>
<b>2:00 pm – 3:00 pm</b>	<b><i>Lunch Break</i></b>
<b>3:00 pm – 4:30 pm</b>	<b>Lecture 6: Health, Safety, and Hygiene in Academic and Work Environments</b> <ul style="list-style-type: none"> <li>• Workplace and campus hygiene</li> <li>• Ergonomics and posture</li> <li>• Safety practices and first-aid awareness</li> </ul>
<b>4:30 pm – 5:00 pm</b>	<b>Valedictory Session &amp; Vote of Thanks</b>

**Government of West Bengal**  
**Department of Science & Technology and Biotechnology (DSTBT)**  
**Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1**  
**Salt Lake, Kolkata-700064**

**Application Format for Science Popularization Programme**

1. Programme Type (ref SN 11 of the Memorandum): **Seminar**
2. Title of the proposed Programme: **Waste to Wealth: Science, Innovation and Sustainability**
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community): **Students (UG&PG) and Academicians**

4. Duration (days): **2 Days**

5. Tentative Dates of the proposed Programme: **19/03/2026-20/03/2026**

6. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary):

**Attached as Annexure -III**

7. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary):

**Name:** Dr.Sujan Krishna Samanta

**Designation:** Associate Professor

**Postal Address:** Department of Biomedical Engineering, Netaji Subhash Engineering College, Technocity,Garia, Panchpota, Kolkata-700152

**Mobile no. 8240553172, 9434684085**

**E-mail id :** dr.sujan.krishna@nsuec.edu.in

8. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ ITI/ Autonomous body/ registered NGO/ Trust etc.): **Institute**

9. Date wise detail Programme Schedule (attach separate sheet, if necessary): **Annexure-IV**

10. Collaborating Institutions/ Organizations, if any, with their specific contribution: **Not Applicable**

11. Expected number of participants and list of Resource Persons/ Invited Speakers:

**Expected number of participants:50**

**Resource Persons/ Invited Speakers: 5**

12. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc. **Not Applicable**

13. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant:

**Responsible person:** Dr. Sujan Krishna Samanta, Department of Biomedical Engineering, Netaji Subhash Engineering College, Technocity,Garia, Panchpota, Kolkata-700152

14. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):

D: ₹108000 = (A: ₹ 120000 B: ₹12000 C: ₹ 0)

(Provide a detailed budget break-up as per Annexure-I and Bank details as per Annexure-II):

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: **YES/NO**
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): **YES/NO**
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: **YES/NO**

**DECLARATION**

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

  
Signature:

Date: 15/12/2025

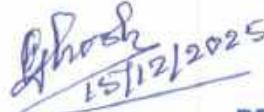
Name of Programme Coordinator:

Dr. Sujan Krishna Samanta

Designation: Associate Professor

Address: Netaji Subhash Engineering College  
Kolkata-700152

Signature:

  
15/12/2025

Date: 15/12/2025

Name of Head of the

Amal Kumar Ghosh

Designation: Principal

Address: Netaji Subhash Engineering  
College, Kolkata-700152

**PRINCIPAL**

**Netaji Subhash Engineering College**

**Tatnali City, Garia, Kolkata-700152**

**West Bengal, India**

(Office Seal)

**RECOMMENDATION**  
(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and 1/ we recommend the said proposal for getting grant-in-aid from DSTBT, Govt. of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

Address:

(Office Seal)

### Annexure-I

#### Proposed Total Budget with break-ups

##### A. Total Estimated Expenditure

Sl.No.	Items required with justification and rate	Total Expenditure (A)(₹)
1.	Honorarium to Resource Persons/ Experts	33000
2.	Study materials, Consumables expenses	10000
3.	Hall rent, if any	Nil
4.	Publicity materials	5000
5.	Travel expenses	5000
6.	T.A. to the external Resource Persons/ Experts	10000
7.	Documentation expenses including audio-visual	7000
8.	Light refreshments	38000
9.	Auditors' fee	7000
10.	Other expenses, if any (please specify)	5000
<b>Grand Total Expenditure (₹):</b>		<b>120000</b>

Please mention:

B. Institution/ Organisation contribution in ₹ : 12,000/  
C. Contribution from any other sources (with name & Address) in (₹): Not applicable  
D. Grant expected from DSTBT (₹) = (A-B-C) = ₹1,08,000/

*Subhash*  
15/12/2025  
Signature of Authorized Personnel with seal  
PRINCIPAL  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

If C=0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other sources

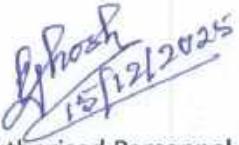
Signature of Authorized Personnel with seal

\* At least 10% of the total budget contribution from the Institute/ Organization is desirable

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number &	1431012100000012
Name of the Account holder/Organisation	
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	8240553172
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J



Signature of Authorised Personnel with seal

**PRINCIPAL**  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

### **Annexure -III**

#### **Aims:**

The aim of this seminar is to create awareness and promote scientific understanding of waste as a valuable resource, and to highlight how innovative technologies, research, and sustainable practices can convert waste materials into economically viable and environmentally friendly products.

The seminar seeks to bring together academicians, researchers, students, and industry professionals to exchange ideas on resource recovery, circular economy concepts, and sustainable development, thereby encouraging responsible waste management and innovation-driven solutions for societal and environmental challenges.

#### **Objectives:**

1. To create awareness about the importance of waste management in sustainable development and to highlight scientific and technological innovations that enable the conversion of waste into valuable products.
2. To promote the concept of waste valorization and circular economy for efficient resource utilization.
3. To encourage research and innovation in transforming Natural, industrial, agricultural, biomedical, and municipal waste into wealth-generating resources.
4. To discuss environmental, economic, and social benefits of waste-to-wealth strategies.
5. To inspire young minds and entrepreneurs to develop sustainable solutions and startups based on waste-derived materials and technologies.
6. To align waste management practices with global sustainability goals

**Annexure -IV**

**Detailed Program Schedule :**

<b>Time: Day 1</b>	<b>Sessions</b>
10:00 – 10:30 AM	Inauguration Session • Welcome Address • Opening Remarks • Inaugural Address
10:30 – 11:30 AM	Lecture 1: <i>Waste to Wealth: Vision, Scope and National Priorities</i>
11:30 – 12:30 PM	Lecture 2: <i>Fundamentals of Waste Management and Sustainable Development</i>
12:30 – 1:30 PM	Lecture 3: <i>Scientific Principles of Waste Valorization</i>
1:30 – 2:30 PM	Lunch Break
2:30 – 3:30 PM	Lecture 4: <i>Innovative Technologies for Converting Waste into Valuable Materials</i>
3:30 – 4:00 PM	Tea
4:00 – 5:00 PM	Poster competition for students

<b>Time: Day 2</b>	<b>Sessions</b>
10:00 – 11:00 AM	Lecture 5: <i>Industrial and Agricultural Waste as a Resource</i>
11:00-11:30	Tea
11:30 – 12:30 PM	Lecture 6: <i>Waste-Derived Materials for Energy, Environment and Healthcare</i>
12:30 – 1:30 PM	Lecture 7: <i>Biotechnology and Nanotechnology Approaches in Waste Utilization</i>
1:30 – 2.30 PM	Lunch Break
2:30 – 3.30 PM	Lecture 8: <i>Role of Circular Economy in Waste-to-Wealth Models</i>
3:30 – 4.30 PM	Lecture 9: <i>Policies, SDGs and Regulatory Framework for Sustainable Waste Management</i>
4.30 – 5:00 PM	Valedictory Session: <i>Future Trends, Challenges and Roadmap for Waste to Wealth</i> • Feedback • Certificate Distribution • Vote of Thanks

Government of West Bengal  
Department of Science & Technology and Biotechnology (DSTBT)  
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1  
Salt Lake, Kolkata-700064

Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): Seminar and Workshop organized by college
2. Title of the proposed Programme: Emerging trends in idea generation, creativity and innovation.
3. Target Group : Faculty, University students and prospective entrepreneurs.
4. Duration (days): 2(Two)
5. Dates of the proposed Programme: 13<sup>th</sup> and 14<sup>th</sup> March 2026.
6. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): Refer Annexure III
7. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary): Prof. Arnab Bandyopadhyay, Assistant Professor, 21DGobindo Ghoshal Lane, Kolkata 700025, 9831254614, arnab.bandyopadhyay@nsec.ac.in
8. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ IT /Autonomous body/ registered NGO/ Trust etc.): .....
9. Date wise detail Programme Schedule (attach separate sheet, if necessary) : Refer Annexure IV
10. Collaborating Institutions/ Organizations, if any, with their specific contribution: Wadhwani Foundation.....
11. Expected number of participants and list of Resource Persons/ Invited Speakers: Expected 100 participants and 4 resource persons
12. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc.: NA
13. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant: NA
14. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):  
D : 94,500 ..... A: 1,05,000 ..... B : 10,500

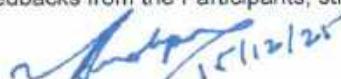
Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: **YES/NO**
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Lt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): **YES/NO**
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: **YES/NO**

**DECLARATION**

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature:



Date:

Name of Programme Coordinator: **A KUMAR BANDYOPADHYAY**

Designation: **Asst. Professor**

Address:

**21B, Gobindo Ghoshal Lane  
Kolkata 700025**

Signature:



Date: **15.12.2025**

Name of Head of the Institution:

**PRINCIPAL**

**Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152**

**West Bengal, India**

Designation:

Address:

(Office Seal)

**RECOMMENDATION**  
(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and I/ we recommend the said proposal for getting grant-in-aid from DSTBT. Govt. of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

(Office Seal)

Address:

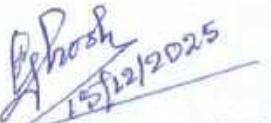
Proposed Total Budget with break-ups

A. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	25,000
2.	Study materials, Consumables expenses	15000
3.	Hail rent, if any	Nil
4.	Publicity materials	3000
5.	Travel expenses	5000
6.	T.A. to the external Resource Persons/ Experts	5000
7.	Documentation expenses including audiovisual	5000
8.	Light refreshments	35000
9.	Auditors' fee	7000
10.	Other expenses, if any (please specify)	5000
Grand Total Expenditure (Rs.):		1,05000

Please mention:

- B. Institution/ Organization Contribution\* in Rs.10,500
- C. Contribution from any other sources (with name & Address) in Rs.
- D. Grant expected from DSTBT (Rs.) = (A-B-C) Rs. 94,500

  
Signature of Authorized Personnel with seal

**PRINCIPAL**

**Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India**

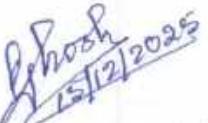
Signature of Authorised Personnel with seal

\*At least 10% of the total budget contribution from the Institute/ Organization is desirable.

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number &	1431012100000012
Name of the Account holder/Organisation	
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	9831254614
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J

  
Signature of Authorised Personnel with seal

**PRINCIPAL**  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

# **EMERGING TRENDS IN IDEA GENERATION, CREATIVITY AND INNOVATION**

## **ANNEXTURE III**

**AIM:** To empower participants with the mindset, and to equip them with modern tools, and emerging frameworks which are necessary to systematically generate breakthrough ideas, lead creative initiatives, and foster a sustainable culture of innovation in an era of rapid technological and market change.

### **OBJECTIVES**

Categorizing objectives using **Bloom's Taxonomy** ensuring that the workshop targets a comprehensive range of cognitive skills, moving participants beyond simple recall and into higher-level thinking, application, and creation.

**Level 1: Remembering (Recall or recognize information)**

Recall the three distinct stages of the innovation lifecycle: Idea Generation, Validation, and Implementation.

**Level 2: Understanding (Grasp the meaning of material)**

Understand the fundamental differences between **Creativity, Idea Generation, and Innovation**, and identify the role of each in value creation.

**Level 3: Applying (Use a concept in a new situation)**

Apply at least three structured, modern ideation techniques (e.g., **SCAMPER, Crazy 8s**) to solve a real-world problem.

**Level 4: Analyzing (Break down material or concepts into components)**

Analyze the impact of key emerging trends, specifically **Generative AI and Ecosystem Collaboration**, on traditional ideation processes. Identify and mitigate common organizational and psychological barriers that block innovation and cultivate a safe, inclusive environment for creative risk-taking.

#### **Level 5: Evaluating (Make judgments about the value of ideas or material)**

**Evaluate** ideas generated during the workshop using structured evaluation criteria (e.g., Impact vs. Feasibility) to select the most promising concepts for further development.

#### **Level 6: Creating (Build a new structure or pattern)**

**Develop** an action plan or **Minimum Viable Prototype (MVP)** concept to move a selected idea from theory into a testable real-world application using principles of Lean Experimentation.

### **Program Details**

#### **Topic 1: AI-Powered Creativity & Ideation (Emerging Trend)**

- **Key Discussion:** How **Generative AI** (like large language and image models) is becoming a co-pilot for innovation—automating basic idea drafts, exploring adjacent concepts, and accelerating prototyping.
- **Activity: AI Co-Pilot Challenge:** Participants use a simple AI tool (even a free online one) for 5-10 minutes to generate 10 variations on a provided product/service idea. Discuss the quality and unexpectedness of the AI-generated results.

#### **Topic 2: Open Innovation & Ecosystem Collaboration**

- **Key Discussion:** The trend of moving beyond internal R&D to leverage external crowdsourcing, partnerships, and hackathons for idea input.
- **Activity: Ecosystem Map Sketch:** Small groups sketch a simple map of their industry's *external* sources of innovation (startups, academia, customers, suppliers).

#### **Topic 3: Design Thinking and the Iterative Process**

- **Key Concept:** Reinforcing Design Thinking as the foundational framework that connects empathy, ideation, and prototyping.

#### **Topic 4: Structured Ideation Techniques**

- **Activity: SCAMPER Drill (Substitute, Combine, Adapt, Modify, Put to another Use, Eliminate, Reverse):**
  - Present a common object or existing product (e.g., a standard backpack).
  - Groups apply each letter of the **SCAMPER** acronym to the object for 5 minutes each, writing down a new product idea for each letter.

## Topic 5: Visual and Embodied Ideation

- **Key Concept:** Moving beyond text: the power of quick sketching, **Storyboarding**, and **Bodystorming** (physically acting out scenarios) to uncover deeper insights and solutions.
- **Activity: Six-Panel Storyboard:** Given a user problem, individuals quickly sketch a Six-panel "before and after" storyboard of a potential solution.

## Topic 6: Idea Evaluation and Prioritization

- **Key Concept:** Moving from quantity to quality using structured evaluation criteria (e.g., impact vs. feasibility, or alignment with strategic goals).
- **Activity: Prioritization Dot Voting & Heat Map:** Groups share their top 3 ideas from Module 2. Participants use "dot stickers" (or virtual dots) to vote for the ideas they believe have the highest *Impact* and highest *Feasibility*. Visualize the results on a simple 2x2 matrix (Impact vs. Feasibility).
- **Topic 7: The Lean Experimentation Mindset**
  - **Key Concept:** Innovation is an experiment. Using Minimum Viable Product (**MVP**) and rapid prototyping to test assumptions and gather real-world data quickly.
- **Topic 8: Building a Culture of Innovation**
  - **Discussion:** The role of psychological safety, challenging assumptions, and creating time/space for creative reflection in an organization.

## **ANNEXTURE IV**

### **Detailed Programme Schedule**

DAY	TIME	EVENT
1	10.00 – 10.30	Inauguration and Welcome Address by HOI
1	10.30 -11.30	Topic 1: AI-Powered Creativity & Ideation (Emerging Trend)
1	11.30 -12.30	Topic 2: Open Innovation & Ecosystem Collaboration
1	12.30 – 13.30	Activity in Breakout Rooms
1	13.30 -14.00	Lunch Break
1	14.00 – 15.00	Topic 3 : Design Thinking and the Iterative Process
1	15.00 – 16.00	Topic 4: Structured Ideation Techniques
1	16.00-17.00	Activity in Breakout Rooms : SCAMPER Drill
2	10.00 – 11.00	Topic 5: Visual and Embodied Ideation
2	11.00 – 12.00	Activity in Breakout rooms :Six-Panel Storyboard
2	12.00 -13.00	Topic 6: Idea Evaluation and Prioritization
2	13.00 – 13.30	Lunch Break
2	13.30 – 14.30	Topic 7: The Lean Experimentation Mindset
2	14.30 -15.30	Activity in Breakout rooms : MVP
2	15.30 -16.30	Topic 8: Building a Culture of Innovation
2	16.30 -17.00	Tea break with feedback and networking
2	17.00 – 17.30	Closing Ceremony with certificate and award distribution

Government of West Bengal  
Department of Science & Technology and Biotechnology (DSTBT)  
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1  
Salt Lake, Kolkata-700064

Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): Workshop.....
2. Title of the proposed Programme: Blockchain Technology: A Two-Day Skill Development Workshop
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community): College Student
4. Duration (days): 2 days .....
5. Tentative Dates of the proposed Programme: 16.4.26 and 17.4.26
6. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): Attached as Annexure III
7. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary):
  - Name: Dr. Aradhita Mukherjee
  - Designation: Associate Professor
  - Postal Address: Netaji Subhash Engineering College, Garia, Techno City, Ranabhatia, West Bengal 700152
  - Mobile No.: 9477437924
  - Email id.: aradhita.mukherjee@nsec.ac.in
8. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ IT!/ Autonomous body/ registered NGO/ Trust etc.): Institute
9. Date wise detail Programme Schedule (attach separate sheet, if necessary): Annexure IV
10. Collaborating Institutions/ Organizations, if any, with their specific contribution: Not Applicable
11. Expected number of participants and list of Resource Persons/ Invited Speakers: Expected number of participants: 50, Resource Persons: 5
12. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc.: Not Applicable
13. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant:
  - Name and address of the authority: Netaji Subhash Engineering College
  - Responsible person: Dr. Aradhita Mukherjee
14. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) I

Grant expected from DSTBT(D):

D: ₹112500 = (A: ₹125000 - B: ₹12500 - C: ₹0)

(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-IIup as per Annexure-I and Bank details as per Annexure-II):

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: YES
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): YES/NO
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: YES/NO

**DECLARATION**

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature: 

Date: 15/12/2025

Name of Programme Coordinator: Dr. Aradhita Mukherjee

Designation: Associate Professor

Address: CSE-AIML(Netaji Subhash Engineering College)  
Garia, Techno City, Ranabhatia, West Bengal 700152

Signature: 

Date: 15.12.2025

Name of Head of the Institution:

Designation:

Address:

**PRINCIPAL**

Netaji Subhash Engineering Col  
Techno City, Garia, Kolkata-701  
West Bengal, India

(Office Seal)

Annexure-I

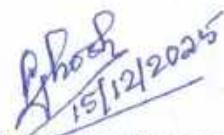
Proposed Total Budget with break-ups

A. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	25000
2.	Study materials, Consumables expenses	20000
3.	Hail rent, if any	15000
4.	Publicity materials	5000
5.	Travel expenses	3000
6.	T.A. to the external Resource Persons/ Experts	3000
7.	Documentation expenses including audiovisual	7000
8.	Light refreshments	35000
9.	Auditors' fee	7000
10.	Other expenses, if any (please specify)	5000
Grand Total Expenditure (Rs.):		125000

Please mention:

- B. Institution/ Organization Contribution\* in Rs. 12500
- C. Contribution from any other sources (with name & Address) in Rs: .Not applicable
- D. Grant expected from DSTBT (Rs.) = (A-B-C) 112500

  
 Signature of Authorized Personnel with seal  
**PRINCIPAL**  
**Netaji Subhash Engineering College**  
 TECNO CITY, Baruipur, Howrah 700152  
 West Bengal, India

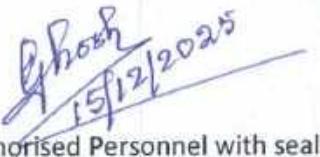
Signature of Authorised Personnel with seal

\*At least 10% of the total budget contribution from the Institute/ Organization is desirable.

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number & Name of the Account holder/Organisation	1431012100000012
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	9477437924
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J

  
Signature of Authorised Personnel with seal

**PRINCIPAL**  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

**Aim:**

This workshop's main goal is to give undergraduate students a fundamental understanding of blockchain technology so they can comprehend its applications in emerging digital public infrastructure, governance, finance, healthcare, and secure digital systems in line with national digital transformation initiatives. In the near future, blockchain technology will be used by all application programs to facilitate safe transactions.

**Objectives:**

1. To present the basic ideas of blockchain technology, such as smart contracts, distributed ledger systems, consensus procedures, and cryptographic concepts.
2. To get practical knowledge through interactive workshops that cover blockchain architecture, the creation and implementation of smart contracts, transaction validation, and block mining simulations using local and test blockchain environments like Ethereum.
3. To raise awareness of the practical uses of blockchain technology, with a focus on supply chain management, digital identification, e-governance, healthcare data security, and financial systems.
4. To encourage the safe and moral application of blockchain technology by stressing security, privacy, compliance, responsible innovation, and common flaws and assaults.
5. To match student education with professional preparedness and national digital initiatives, such as Digital India, blockchain-based governance frameworks, new business trends, and chances for research or entrepreneurship.

**Blockchain Initiatives by the Government:**

1. To standardize, integrate, and extend blockchain adoption across public services, the Indian government has created the National Blockchain Framework (NBF) through the Ministry of Electronics and Information Technology (MeitY). Blockchain-as-a-Service (BaaS) and applications in governance domains including certificates, property records, and judicial data are supported by the platform's modular Vishvasya Blockchain Stack.
2. A number of Indian states are implementing blockchain technology to improve governance:
  - To cut down on fraud and conflicts, Kerala is updating land records with a blockchain-powered "One Title – One Truth" system.
  - To safeguard e-services and citizen records, Tamil Nadu has started blockchain backbone projects including "Nambikkai Inaiyam" and the e-Pettagam app. Hyperledger LF
  - **Blockchain and NFTs have been used in West Bengal to verify property rights and modify land.**

**Blockchain Initiatives by Government Outside India**

1. Estonia: Leading Blockchain E-Government: Estonia is a well-known pioneer in blockchain-enabled governance, utilizing KSI Blockchain for state registries, court systems, healthcare records, and secure digital identities. This ensures data integrity in all public sectors is impenetrable.
2. Singapore: Trade and Document Blockchain: Singapore has created blockchain technologies for cross-border trade data exchange and tamper-proof document verification through programs like OpenAttestation and TradeTrust, which are acknowledged internationally as UN Digital Public Goods.

**Date-Wise Detailed Programme Schedule****Day 1: Foundations of Blockchain Technology**

Time	Session Title	Details / Topics	Mode
09:30 – 10:00 AM	Registration & Inaugural Session	Welcome address, objectives of the workshop, overview of the programme	Inaugural
10:00 – 11:30 AM	Session 1: Introduction to Blockchain	Blockchain fundamentals, distributed ledger systems, types of blockchains (public, private, consortium)	Lecture
11:30 – 11:45 AM	Tea Break	—	—
11:45 – 01:15 PM	Session 2: Consensus & Cryptography	Consensus mechanisms (PoW, PoS), hashing, digital signatures, public-private key cryptography	Lecture + Demo
01:15 – 02:00 PM	Lunch Break	—	—
02:00 – 03:30 PM	Session 3: Blockchain Architecture	Block structure, transactions, Merkle trees, nodes, wallets, and blockchain workflow	Lecture
03:30 – 03:45 PM	Tea Break	—	—
03:45 – 05:00 PM	Session 4: Hands-on Lab I	Setting up blockchain development environment, introduction to Ethereum test networks and local blockchain setup	Practical

## Day 2: Smart Contracts, Applications, and Security

Time	Session Title	Details / Topics	Mode
09:30 – 11:00 AM	Session 5: Smart Contracts	Smart contract concepts, lifecycle, introduction to Solidity, contract design principles	Lecture
11:00 – 11:15 AM	Tea Break	—	—
11:15 – 01:00 PM	Session 6: Hands-on Lab II	Smart contract coding, deployment, and interaction using local/test blockchain environments	Practical
01:00 – 01:45 PM	Lunch Break	—	—
01:45 – 02:45 PM	Session 7: Blockchain Applications	Use cases in e-governance, digital identity, supply chain management, healthcare, and financial systems	Case Studies
02:45 – 03:45 PM	Session 8: Security & Ethical Considerations	Blockchain vulnerabilities, common attacks, privacy issues, compliance, and ethical use	Lecture
03:45 – 04:00 PM	Tea Break	—	—
04:00 – 04:45 PM	Session 9: Emerging Trends & Career Opportunities	Cross-chain and multi-chain systems, Web3, research opportunities, startups, and career pathways	Interaction
04:45 – 05:00 PM	Valedictory Session	Feedback, certificate distribution, and closing remarks	Valedictory

**Government of West Bengal**  
**Department of Science & Technology and Biotechnology (DSTBT)**  
**Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1**  
**Salt Lake, Kolkata-700064**

**Application Format for Science Popularization Programme**

1. Programme Type (ref SN 11 of the Memorandum): **Seminar**
2. Title of the proposed Programme: **Cyber Security for Developing Countries**
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community): **College Students**
4. Duration (days): **02**; Tentative Dates of the proposed Programme: **15<sup>th</sup>, 16<sup>th</sup> January 2026**
5. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): **Attached as Annexure III**
6. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary):  
**Name: Prof. Rajkumar Patra,**  
**Designation : Assistant Professor,**  
**Postal Address : Netaji Subhash Engineering College, Technocity, Garia, Kolkata-152,**  
**Mobile No: 9038264913,**  
**Email: rajkumar.patra@nsec.ac.in**
7. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ IT!/ Autonomous body/ registered NGO/ Trust etc.): **College**
8. Date wise detail Programme Schedule (attach separate sheet, if necessary):
9. Collaborating Institutions/ Organizations, if any, with their specific contribution: **NA**
10. Expected number of participants and list of Resource Persons/ Invited Speakers:  
**Expected Number of Participants: 50**  
**Expected Number of Resource Persons: 04**
11. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc.: **NA**
12. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant:  
**Name & Address of the Authority: Netaji Subhash Engineering College**  
**Responsible Person: Prof. Rajkumar Patra**
13. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):  
**D : ₹90,000 = (A: ₹1,00,000 - B: ₹10,000 - C: ₹0)**  
(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: **YES/NO**
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): **YES/NO**
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: **YES/NO**

**DECLARATION**

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature: *Rajkumar Patra*

Signature: *Abhish*

Date: 15/12/2025

Date: 15.12.2025

**PRINCIPAL**

Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

Name of Programme Coordinator: Prof. Rajkumar Patra Name of Head of the Institute

Designation: Assistant Professor

Designation:

Address: Netaji Subhash Engineering College  
Techno City, Garia, Kol-152

Address:

(Office Seal)

**RECOMMENDATION**

(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and 1/ we recommend the said proposal for getting grant-in-aid from DSTBT, Govt. of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

(Office Seal)

Address:

Annexure-I

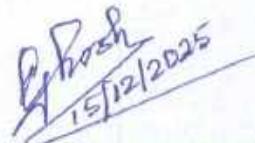
Proposed Total Budget with break-ups

A. Total Estimated Expenditure

SI. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	20000/-
2.	Study materials, Consumables expenses	20000/-
3.	Hall rent, if any	10000/-
4.	Publicity materials	3000/-
5.	Travel expenses	5000/-
6.	T.A. to the external Resource Persons/ Experts	2000/-
7.	Documentation expenses including audiovisual	5000/-
8.	Light refreshments	2500/-
9.	Auditors' fee	5000/-
10.	Other expenses, if any (please specify)	5000/-
Grand Total Expenditure (Rs.):		1,00,000/-

Please mention:

- B. Institution/ Organization Contribution\* in Rs. 10,000/-
- C. Contribution from any other sources (with name & Address) in Rs. 0/-
- D. Grant expected from DSTBT (Rs.) = 90,000/-



15/12/2025

Signature of Authorized Personnel with seal

PRINCIPAL  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

If C = 0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other sources

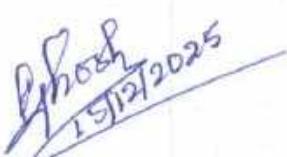
Signature of Authorised Personnel with seal

\*At least 10% of the total budget contribution from the Institute/ Organization is desirable.

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number & Name of the Account holder/Organisation	1431012100000012
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	9038264913
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J



Signature of Authorised Personnel with seal

**PRINCIPAL**  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

### Annexure-III

The aim of this seminar is to raise awareness and strengthen capacity in developing countries to address cyber security challenges, safeguard digital systems, and support secure and sustainable digital transformation. The seminar seeks to equip participants with essential knowledge and practical understanding of cyber security threats and solutions relevant to developing countries. It aims to increase awareness of common cyber risks such as hacking, phishing, malware, and data breaches, and to highlight their impact on individuals, organizations, and national development. The seminar also focuses on building technical and human capacity by introducing basic cyber security practices, low-cost security tools, and effective risk management strategies suitable for resource-limited environments. Emphasis is placed on protecting critical infrastructure in key sectors such as government, finance, healthcare, education, and telecommunications.

Government of West Bengal  
Department of Science & Technology and Biotechnology (DSTBT)  
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1  
Salt Lake, Kolkata-700064

Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): **Seminar**
2. Title of the proposed Programme: "**Climate Crisis: Environmental Challenges and Earth Science-Based Solutions**"
3. Target Group : **Faculty Members, Teacher, Research Scholar, School/College/ University Student, Community**
4. Duration (days): **2 days**; Tentative Dates of the proposed Programme: **12-13 February, 2026**
5. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): **See Separate Sheet**
6. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary):  
Dr Indranil Ghosh,  
Professor  
Netaji Subhash Engineering College  
9830153972  
indranil.ghosh@nsec.ac.in
7. Legal status of the Institute: **College**
8. Date wise detail Programme Schedule (attach separate sheet, if necessary): **See Separate Sheet**
9. Collaborating Institutions/ Organizations, if any, with their specific contribution: **NA**
10. Expected number of participants and list of Resource Persons/ Invited Speakers: **Expected number: 100**  
**List of Resource Persons:**
  - i. Dr. Anupam Ghosh, Associate Professor, Jadavpur University, Kolkata - 700 032, West Bengal
  - ii. Dr. Pragnaditya Malakar, Assistant Professor, Jadavpur University, Kolkata - 700 032, West Bengal,
  - iii. Dr. Susanta Chaudhuri, Assistant Professor, Jadavpur University, Kolkata - 700 032, West Bengal,
  - iv. Dr Rajdip Dey, Professor, Sister Nivedita University, Kolkata, West Bengal
  - v. Dr Debapriya De, Principal, Panihati College, West Bengal
  - vi. Dr Sadhan Kumar Ghosh, Professor, Jadavpur University, Kolkata - 700 032, West Bengal
  - vii. S K Roy, Former National Deputy Director (Education), Govt. of India, New Delhi
  - viii. Dr Debasish Sarkar, Professor, Calcutta University, Kolkata

11. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc.: *N/A*

12. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant:

*Netaji Subhash Engineering College,*

*Responsible Person : Dr Indranil Ghosh, Professor*

13. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):

*D : 112500 = (A: 125000 - B: 12500 - C: 00 )*

(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: YES/NO
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): YES/NO
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: YES/NO

DECLARATION

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature: *Indranil Ghosh*  
Date: 15/12/2025

Name of Programme Coordinator:  
**DR INDRANIL GHOSH**

Designation:

**PROFESSOR**

Address: *Netaji Subhash Engg College*

**DR. INDRANIL GHOSH**

**PROFESSOR**

**PROFESSOR IN CHARGE**

UNIVERSITY AFFAIRS & EXAMINATION

NETAJI SUBHASHE ENGINEERING COLLEGE **RECOMMENDATION**

(only for registered NGO/ Trust)

TECHNOLOGY, GARIA, KOLKATA-700152

Certified that the said Organisation is reputed in this field and I/ we recommend the said proposal for getting grant-in-aid from DSTBT, Govt of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

Address:

(Office Seal)

Signature: *g.ghosh*  
Date: 15-12-2025

**PRINCIPAL**

Netaji Subhash Engineering College  
Technological City, Garia, Kolkata-700152

West Bengal, India

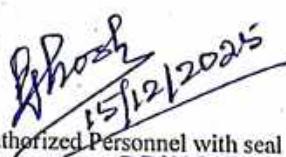
## Proposed Total Budget with break-ups

## A. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	32000
2.	Study materials, Consumables expenses	10000
3.	Hail rent, if any	NIL
4.	Publicity materials	5000
5.	Travel expenses	5000
6.	T.A. to the external Resource Persons/ Experts	8000
7.	Documentation expenses including audiovisual	3000
8.	Light refreshments	50000
9.	Auditors' fee	7000
10.	Other expenses, if any (please specify)	5000
Grand Total Expenditure (Rs.):		1,25,000

Please mention:

- B. Institution/ Organization Contribution\* in Rs. 12,500
- C. Contribution from any other sources (with name & Address) in Rs. 00
- D. Grant expected from DSTBT (Rs.) = (A-B-C) 1,12,500



Signature of Authorized Personnel with seal  
**PRINCIPAL**

If C= 0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other sources  
**Netaji Subhash Engineering College**  
**Techno City, Garia, Kolkata-700 152**  
**West Bengal, India**

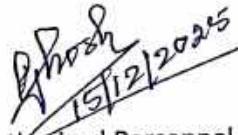
Signature of Authorised Personnel with seal

\*At least 10% of the total budget contribution from the Institute/ Organization is desirable.

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number & Name of the Account holder/Organisation	1431012100000012
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	9830153972
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J

  
Signature of Authorised Personnel with seal

PRINCIPAL  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

### **Aims, Objectives and details of the program**

- To develop a basic understanding of the Earth system, including the atmosphere, hydrosphere, lithosphere, and biosphere.
- To explain the concept of environment and its components and their interrelationship with human activities.

To understand the causes and mechanisms of climate change, including greenhouse effect and global warming.

- To analyze the impacts of climate change on ecosystems, biodiversity, water resources, agriculture, and human health.
- To create awareness about environmental degradation, pollution, and unsustainable resource use.
- To discuss mitigation and adaptation strategies for climate change at local, national, and global levels.
- To highlight the role of international agreements, policies, and sustainable development goals (SDGs) in addressing climate change.
- To encourage environmentally responsible behavior and promote sustainable lifestyles among individuals and communities.



*Indranil Ghosh*

DR. INDRANIL GHOSH  
PROFESSOR  
PROFESSOR IN CHARGE  
UNIVERSITY AFFAIRS & EXAMINATION  
NETAJI SUDHASH ENGINEERING COLLEGE  
TECHNOCITY, PARIA, KOLKATA-700152  
INDIA

Government of West Bengal  
Department of Science & Technology and Biotechnology (DSTBT)  
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1  
Salt Lake, Kolkata-700064

Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): **Workshop**

Title of the proposed Programme: **Applied Artificial Intelligence and Machine Learning: From Optimization to Sensing**

2. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community): **Faculty and Research Scholar**

3. Duration (days): 02 days; Tentative Dates of the proposed Programme: **5<sup>th</sup> and 6<sup>th</sup> February, 2025**

4. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): **Separate sheet is attached**

5. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary):

Name of Program Coordinator: **Dr. Anuradha Saha**

Designation: **Assistant Professor and HOD, AEIE Dept. NSEC**

Postal Address: **Mauza Ranabhatia, Techno City, Garia, Ranabhatia, West Bengal 700152**

Mobile No: **9831022387**

Email ID: **anuradha.saha@nsec.ac.in (Detail of the other Coordinator is attached in separate sheet)**

6. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ IT/ Autonomous body/ registered NGO/ Trust etc.): **Engineering College**

7. Date wise detail Programme Schedule (attach separate sheet, if necessary): **Separate sheet is attached**

8. Collaborating Institutions/ Organizations, if any, with their specific contribution: **NA.....**

9. Expected number of participants and list of Resource Persons/ Invited Speakers:

**Expected number of participants: 50**

**Number of Invited Speakers: 8 (List of invited speakers is attached in separate sheet)**

10. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc.: **NA**

11. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant: **Netaji Subhash Engineering college**

Responsible Person: **Dr. Anuradha Saha**

12. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):

A. **D : Rs. 1,27,750.00 = (A: Rs.1,42,000.00 - B: Rs. 14,250.00 - C: Rs.0.00 )**

(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: YES/NO
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): YES/NO
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: YES/NO

DECLARATION

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilization Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature: *Anuradha Saha* HOD

Date: 15.12.2025 Applied Electronics & Instrumentation Engg.  
Netaji Subhash Engineering College

Name of Programme Coordinator: Dr. Anuradha Saha

Designation: Assistant Professor and HOD, AEIE Dept. NSEC

Address: Mauza Ranabhatia, Techno City, Garia, Ranabhatia, West Bengal 700152

Signature: *R Phosha*

Date: 15.12.2025

Name of Head of the Institution

Designation:

Address:

**PRINCIPAL**

**Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India**

(Office Seal)

RECOMMENDATION  
(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and 1/ we recommend the said proposal for getting grant-in-aid from DSTBT. Govt. of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

(Office Seal)

Address:

Annexure-I

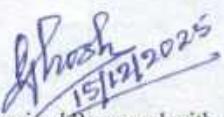
Proposed Total Budget with break-ups

B. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	35000.00
2.	Study materials, Consumables expenses	20000.00
3.	Hail rent, if any	18000.00
4.	Publicity materials	5000.00
5.	Travel expenses	4000.00
6.	T.A. to the external Resource Persons/ Experts	4000.00
7.	Documentation expenses including audiovisual	8000.00
8.	Light refreshments	36000.00
9.	Auditors' fee	7000.00
10.	Other expenses, if any (please specify)	5000.00
Grand Total Expenditure (Rs.):		1,42,000.00

Please mention:

- C. Institution/ Organization Contribution\* in Rs. 14,250.00
- D. Contribution from any other sources (with name & Address) in Rs. NA
- E. Grant expected from DSTBT (Rs.) = (A-B-C) = Rs. 1,27,750.00

  
Signature of Authorized Personnel with seal  
**PRINCIPAL**  
**Netaji Subhash Engineering College**  
**Techno City, Garia, Kolkata-700 152**  
**West Bengal, India**

If C=0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other sources

Signature of Authorised Personnel with seal

\*At least 10% of the total budget contribution from the Institute/ Organization is desirable.

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number &	1431012100000012
Name of the Account holder/Organisation	
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	9831022387
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J

  
Signature of Authorised Personnel with seal

**PRINCIPAL**  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

### ANNEXURE-III

**Name of the Second Program coordinator:** Dr. Swagata Roy Chatterjee

**Designation:** Associate Professor, ECE Department, NSEC

**Email:** swagatar.chatterjee@nsec.ac.in

#### **Aim of the Workshop**

This program fosters interdisciplinary learning and encourages the integration of advanced computing concepts of Artificial intelligence and Machine learning into curriculum design, promoting innovative and future-focused teaching methods. It also serves as a dynamic platform to facilitate collaboration among academic institutions, research organizations, and industry partners. Participants will gain valuable insights into the latest developments in high-performance and intelligent computing, explore potential research directions, and discover opportunities for joint initiatives. By engaging with leading experts and peers, attendees will be better prepared to drive impactful research, contribute to academic excellence and stay at the forefront of technological advancement in their respective fields. It will develop the skills necessary to address real-world challenges by effectively applying these advanced technologies in their respective fields. Participants will gain hands-on experience in solving complex problems using emerging computing tools, equipping them with the expertise to drive innovation. Additionally, they will learn to integrate modern computing technologies into their own research and teaching practices, enhancing their academic and professional contributions. Through this workshop, attendees will be empowered to apply cutting-edge technologies in research projects, optimize teaching methodologies, and contribute to the ongoing evolution of their academic environments. They will leave with the knowledge to foster interdisciplinary collaboration, enhance curriculum development and stay at the forefront of advancements in Supercomputing, AI and Machine Learning.

*Anuradha Saha*  
15/12/25

# Science Popularization Programme

Two-Day Workshop on

## Applied Artificial Intelligence and Machine Learning: From Optimization to Sensing



Scheduled Dates: 05.02.2026 to 06.02.2026

### Workshop Schedule

Day	Morning Session				Afternoon Session			
	Inauguration (9:30am-10:00am)	Session I (10:00am-11:15am) Expert Name: Mr. Ritajit Majumdar Designation: Research Scientist Affiliation: IBM Quantum, IBM India Research Lab, Kolkata Topic: Combinatorial Optimization in Artificial Intelligence and Machine Learning	Tea Break	Session II (11:45am-1:00pm) Expert Name: Dr. Amlan Chakrabarti Designation: Professor and Director Affiliation: A.K. Choudhury School of Information Technology, University of Calcutta, Kolkata Topic: Architectures Supporting Machine Intelligence	R	Session III (2:00pm-3:15pm) Expert Name: Mr. Sourav Chatterjee Designation: Research Engineer Affiliation: TCS Research, Kolkata Topic: Hands on- Machine Learning-Assisted Sensing	Tea Break	Session IV (3:45pm-5:00pm) Expert Name: Dr. Ajanta Das Designation: Professor Affiliation: Amity Institute of Information Technology, Kolkata Topic: Hands-on Sensing for Data-Driven AI Applications
1 (05.02.2026)	Session V (10:00am-11:15am) Expert Name: Dr. Susmita Ghosh Designation: Professor Affiliation: Department of Computer Science & Engineering, Jadavpur University, Kolkata Topic: Recent Applications of Machine Learning	Tea Break	Session VI (11:45am-1:00pm) Expert Name: Mr. Shubrajyoti Moitra Designation: Senior Application Engineer Affiliation: Elmax Systems and Solutions, Kolkata Topic: Hands-on Artificial Intelligence and Machine Learning Using MATLAB	E	Session VII (2:00pm-3:15pm) Expert Name: Mr. Sauryya Maschatak Designation: Manager-Data Engineering Affiliation: Tredence Inc. Topic: Foundations and Importance of Data Engineering in the Modern Data Ecosystem	E	Session VIII (3:45pm-5:00pm) Expert Name: Mr. Tuhin Majumder Designation: Manager- Data Science Affiliation: Tredence Inc. Topic: Leveraging Data Engineering for Effective Data Science Outcomes	
2 (06.02.2026)				S				

For Registration: Dr. Anuradha Saha (Program Coordinator)

Designation: Assistant Professor and HOD, AEIE Dept., NSEC

Mob: 9831022387

Email: anuradha.saha@nsec.ac.in

*Anuradha Saha*  
15/12/25

Government of West Bengal  
Department of Science & Technology and Biotechnology (DSTBT)  
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1  
Salt Lake, Kolkata-700064

Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): Workshop
2. Title of the proposed Programme: 2-Day Workshop in Blockchain Security in Digital Payments
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community):  
College Students .....
4. Duration (days): 2
5. Tentative Dates of the proposed Programme: 10/4/2026-11/4/2026
6. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary):  
Attached as Annexure III
7. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary):
  - Name: Dr. Moujhuri Patra
  - Designation: Associate Professor
  - Postal Address: Garia, Techno City, Ranabhatia, West Bengal 700152
  - Mobile No:9477804830
  - Email-Id: moujhuri.patra@nsec.ac.in
8. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ IT!/ Autonomous body/ registered NGO/ Trust etc.): Institute
9. Date wise detail Programme Schedule (attach separate sheet, if necessary): Annexure IV
10. Collaborating Institutions/ Organizations, if any, with their specific contribution: NA
11. Expected number of participants and list of Resource Persons/ Invited Speakers: 50 participants and 4 resource persons (Maximum)
12. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc.:NA .....
13. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant: Dr. Moujhuri Patra
14. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) *I*  
Grant expected from DSTBT(D):  
D :131400 = (A: 146000 - B: 14600 -C:0 )  
(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: YES/NO
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): YES/NO
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: YES/NO

**DECLARATION**

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature: *Moujhuri Patra*

Date: 15/12/2025

Name of Programme Coordinator: Dr. Moujhuri Patra

Designation: Associate Professor

Address: Garia

Signature: *Ghosh*

Date: 15.12.2025

Name of Head of the Institution

PRINCIPAL

Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

Designation:

Address:

(Office Seal)

**RECOMMENDATION**  
(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and 1/ we recommend the said proposal for getting grant-in-aid from DSTBT. Govt. of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

Address:

(Office Seal)

#### Proposed Total Budget with break-ups

#### A. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	32000
2.	Study materials, Consumables expenses	15000
3.	Hail rent, if any	15000
4.	Publicity materials	8000
5.	Travel expenses	5000
6.	T.A. to the external Resource Persons/ Experts	12000
7.	Documentation expenses including audiovisual	7000
8.	Light refreshments	40000
9.	Auditors' fee	7000
10.	Other expenses, if any (please specify)	5000
Grand Total Expenditure (Rs.):		146000

Please mention:

B. Institution/ Organization Contribution\* in Rs.14600  
C. Contribution from any other sources (with name & Address) in Rs.NA  
D. Grant expected from DSTBT (Rs.) = (A-B-C)

If  $C = 0$

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other sources.

Rs.NA  
  
PRINCIPAL

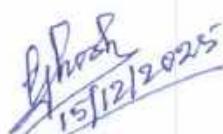
Signature of Authorised Personnel with seal

\*At least 10% of the total budget contribution from the Institute/ Organization is desirable.

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number &	1431012100000012
Name of the Account holder/Organisation	
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	9477804830
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J

  
Signature of Authorised Personnel with seal  
**PRINCIPAL**  
**Netaji Subhash Engineering College**  
**Techno City, Garia, Kolkata-700152**  
**West Bengal, India**

### Annexure III

## 2-Day Workshop on Blockchain Security in Digital Payments

**Participants:** 50

**Resource Persons:** 4

**Focus Area:** Banking Security, Digital Payments, Financial Transactions

**Mode:** Theory + Hands-on Lab Sessions

Day	Time	Session Type	Topic / Activity	Resource Person	Facilities / Inclusions
<b>Day 1 (Half-Day I)</b>	09:30 – 10:00	Inaugural	Registration & Welcome	Coordinator	Refreshment Break
	10:00 – 11:30	Lecture	Blockchain Fundamentals & Role in Banking Security	Resource Person 1	—
	11:30 – 11:45	Break	Tea Break	—	Snacks
	11:45 – 13:15	Lecture	Cryptography, Digital Signatures & Secure Financial Transactions	Resource Person 2	—
	13:15 – 14:00	Lunch Break	Lunch	—	Lunch
<b>Day 1 (Half-Day II)</b>	14:00 – 16:30	Lab Session	Secure Wallets, Key Management & Transaction Authentication (Banking Use-Cases)	Resource Person 3	Computer Lab
	16:30 – 16:45	Break	Evening Snacks	—	Snacks
	16:45 – 17:30	Discussion	Banking Security Challenges & Q&A	Resource Person 3	—
	09:30 – 10:00	Refreshment	Morning Tea	—	Refreshment Break
<b>Day 2 (Half-Day I)</b>	10:00 – 11:30	Lecture	Smart Contracts for Banking & Payment Systems	Resource Person 4	—
	11:30 – 11:45	Break	Tea Break	—	Snacks
	11:45 – 13:15	Lecture	Attacks on Financial Blockchains (51%, Phishing, Fraud, Double Spending)	Resource Person 1	—
	13:15 – 14:00	Lunch Break	Lunch	—	Lunch

<b>Day</b>	<b>Time</b>	<b>Session Type</b>	<b>Topic / Activity</b>	<b>Resource Person</b>	<b>Facilities / Inclusions</b>
<b>Day 2 (Half- Day II)</b>	14:00 – 16:30	<b>Lab Session</b>	Smart Contract Auditing, Secure Banking Transactions & Fraud Detection	Resource Person 2 & 4	Computer Lab
	16:30 – 16:45	Break	Evening Snacks	—	Snacks
	16:45 – 17:30	Valedictory	Feedback, Certificates & Closing	All Resource Persons	—

Government of West Bengal  
Department of Science & Technology and Biotechnology (DSTBT)  
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1  
Salt Lake, Kolkata-700064

Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): Workshop
2. Title of the proposed Programme: **Synergy 2025-26: Transformative Technologies for Social Good-Healthcare & Education**
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community): **Faculty, Teacher & Research Scholar**
4. Duration (days): **2** ; Tentative Dates of the proposed Programme: **24th & 25th January, 2026**
5. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary):  
**Attached**
6. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary): **Dr. Priyadarshiny Dhar, Assistant Professor, Netaji Subhash Engineering College, Technocity, Police Para, Garia, Kolkata-152, 9051747698, priyadarshiny.dhar@nsec.ac.in**
7. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ ITI/ Autonomous body/ registered NGO/ Trust etc.): .....**College**
8. Date wise detail Programme Schedule (attach separate sheet, if necessary):**Attached**
9. Collaborating Institutions/ Organizations, if any, with their specific contribution: .....**No**
10. Expected number of participants and list of Resource Persons/ Invited Speakers: **50 students, and 6 (Attached)**
11. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc.: **NA**
12. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant: **Netaji Subhash Engineering College, Dr. Priyadarshiny Dhar**
13. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):  
**D : 1,50,000 .... = (A: ? 15,000..... - B: ? NIL .. -C: ? 1,35,000 ..... )**  
(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: YES/NO
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): YES/NO
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: YES/NO

DECLARATION

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature: 

Date: 15.12.25

Name of Programme Coordinator: Dr. Priyadarshiny Dhar

Designation: Assistant Professor

Address: NSEC, Techno City, Garia, Kol-152

Signature: 

Date: 15.12.2025

Name of Head of the Institution:

PRINCIPAL

Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

Designation:

Address:

(Office Seal)

RECOMMENDATION  
(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and 1/ we recommend the said proposal for getting grant-in-aid from DSTBT. Govt. of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

Address:

(Office Seal)

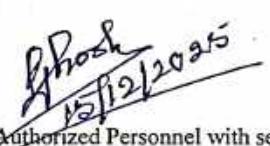
Proposed Total Budget with break-ups

A. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	50000
2.	Study materials, Consumables expenses	15000
3.	Hail rent, if any	15000
4.	Publicity materials	10000
5.	Travel expenses	10000
6.	T.A. to the external Resource Persons/ Experts	10000
7.	Documentation expenses including audiovisual	8000
8.	Light refreshments	20000
9.	Auditors' fee	7000
10.	Other expenses, if any (please specify)	5000
Grand Total Expenditure (Rs.):		1,50,000/-

Please mention:

- B. Institution/ Organization Contribution\* in Rs. 15,000/-
- C. Contribution from any other sources (with name & Address) in Rs. NA
- D. Grant expected from DSTBT (Rs.) = (A-B-C) 1,35,000/-

  
Signature of Authorized Personnel with seal

If C= 0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other sources.  
**PRINCIPAL**  
**Netaji Subhash Engineering College**  
**Techno City, Garia, Kolkata-700 152**  
**West Bengal, India**

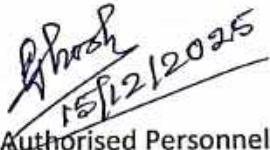
Signature of Authorised Personnel with seal

\*At least 10% of the total budget contribution from the Institute/ Organization is desirable.

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number & Name of the Account holder/Organisation	1431012100000012
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	9051747698
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J

  
Signature of Authorised Personnel with seal

**PRINCIPAL**  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

# Date wise detail Programme Schedule

Tentative session-wise program including speakers with their respective affiliation

## Workshop

### On

#### **“Synergy 2025-26: Transformative Technologies for Social Good- Healthcare & Education” (24<sup>th</sup> & 25<sup>th</sup> January, 2026)**

Day	Time	Concerned Speaker
24.03.2025	09:00 AM	Registration
	10.00AM	<b>Inaugural and address by CEO of Techno India Group (TIG) Dr. Sanku Bose, Guest of honour: Vice Chancellor of Maulana Abul Kalam Azad University of Technology, Prof. Tapas Chakraborty</b>
	11:15AM	<i>Health Break</i>
		<b>Technical Sessions – I</b>
	11:30 AM	<b>Keynote: Dr. Ashish Ghosh</b> Professor (HAG) and Head Machine Intelligence Unit, ISI Kolkata Computer and Communication Sciences Division.
	1:00 PM	<i>Q &amp; A Session</i>
	1:10 PM	<i>Lunch</i>
		<b>Technical Sessions – II</b>
	2:00 PM	<b>Keynote: Dr. Arindam Biswas</b> Professor, Department of Information Technology, IEST, Shibpur.
	3:20 PM	<i>Q &amp; A Session</i>
	3:30 PM	<i>Health Break</i>
		<b>Technical Sessions – III</b>
	3:40 PM	<b>Keynote: Dr. Saptarsi Goswami</b> Assistant Professor, Department of Computer Science, University of Calcutta, West Bengal.
	5:00 PM	<i>Q &amp; A Session</i>
	5.10 PM	<b>Concluding Session</b>
		<b>Technical Sessions – IV</b>
25.03.2025	10:00 AM	<b>Keynote: Dr. Amlan Chakrabarti</b> Professor A.K Choudhury School of Information Technology University of Calcutta, West Bengal
	11:20 AM	<i>Q &amp; A Session</i>
	11:30 PM	<i>Health Break</i>
		<b>Technical Sessions – V</b>
	11:40 PM	<b>Keynote: 1. Dr. Subrata Sarkar</b> Scientist' E' C-DAC, Kolkata
	1:00 PM	<i>Q &amp; A Session</i>
	1:10 PM	<i>Lunch Break</i>
		<b>Technical Sessions – VI</b>

2:00 PM	<b>Keynote: : Dr. Soumya Sen</b> University of Calcutta, West Bengal
3:20 PM	<i>Q &amp; A Session</i>
3:30 PM	<i>Health Break</i>
3:40 PM	<b>Evaluation &amp; Feedback</b>
4:00 PM	<i>Valedictory</i>
4:30 PM	Certificate Distribution
5:00 PM	<b>Concluding Session</b>

## **5. Aim, Objective & Details of the Programme**

### **Workshop on "Synergy 2025-26: Transformative Technologies for Social Good- Healthcare & Education"**

Recently, Transformative Technologies such as AI, Gen AI, IOT, and Block-chain have revolutionized healthcare and Education in several profound ways. This seminar aims to enhance patient engagement, improve disease diagnosis and treatment, accelerate medical research, and improve health outcomes and educational attainment. It offers a widespread understanding of innovative technologies to enhance healthcare management and education across different perspectives. This workshop addresses two main objectives: to explore how the latest technologies influence healthcare and education in operational, strategic, and emergency response domains, and to identify variations in the impact of healthcare management based on temporal and geographical contexts. Advance technologies optimizes production processes by predicting equipment maintenance needs, improving product quality through predictive analytics, and optimizing supply chain management. In healthcare and education, its ability to analyze large datasets, learn from patterns, and make predictions transforms operations, decision-making processes, and customer experiences. As technology advances, its impacts on the healthcare and education sectors are expected to grow even more significantly. In conclusion, this workshop contributes to a deeper understanding of the role of transformative technologies in healthcare and education. In this workshop, the objective is to understand the different applications, latest trends, and recent research on advance techniques in the field of healthcare and education. It provides insights for policymakers, healthcare professionals, and researchers, offering a roadmap for addressing both the opportunities and challenges.

**Government of West Bengal**  
**Department of Science & Technology and Biotechnology (DSTBT)**  
**Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1**  
**Salt Lake, Kolkata-700064**

**Application Format for Science Popularization Programme**

1. Programme Type (ref SN 11 of the Memorandum): **Workshop**
2. Title of the proposed Programme: **2-Day Workshop on Pollution Control (mainly air, water & plastic), Sea surface temperature & Oceanic Pollution.**
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community): **College Student**
4. Duration (days): **2 days;**
5. Tentative Dates of the proposed Programme: **08/04/2026 & 09/04/2026**
6. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): **Attached as Annexure III**
7. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary):

**Name: Prof. ANGSHUMAN SAHU**

**Designation: Assistant Professor, Civil Engineering Department**

**Postal Address: Netaji Subhash Engineering College, Techno City, Garia, Kolkata – 700152**

**Mobile No. – 7278338064**

**Email Id – [angshuman.sahu@nsec.ac.in](mailto:angshuman.sahu@nsec.ac.in)**

8. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ IT/ Autonomous body/ registered NGO/ Trust etc.): **Institute**
9. Date wise detail Programme Schedule (attach separate sheet, if necessary): **Annexure IV**
10. Collaborating Institutions/ Organizations, if any, with their specific contribution: **Not Applicable**
11. Expected number of participants and list of Resource Persons/ Invited Speakers: **No. of Participants – 50; Resource Persons - 5**
12. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc.: **Not Applicable**
13. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant: **Name & Address of the Authority: Netaji Subhash Engineering College, Techno City, Garia, Kolkata – 700152, Responsible Person: Angshuman Sahu**
14. Total Estimated Expenditure (A)/ Organization's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):  
**D: 1,03,500 = (A – Rs. 1,15,000/- B: Rs. 11,500/- -C:0)**

(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

**Check List (put tick) of attachments to be submitted with the application**

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: YES
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): NA
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: NA

**DECLARATION**

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature: *Angshuman Sahu*

Date: 15.12.2025

Name of Programme Coordinator: Prof. Angshuman Sahu

Designation: Assistant Professor

Address: Netaji Subhash Engineering College, Garia  
Techno City, Kolkata - 700152

Signature: *Amal K. Ghosh*

Date: 15.12.2025

Name of Head of the Institute: Amal K. Ghosh  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata - 700152  
West Bengal, India

Designation: Principal

Address: Netaji Subhash Engineering College,  
Garia, Techno City, Kolkata - 700152

(Office Seal)

**PRINCIPAL**

**RECOMMENDATION**  
(only for registered NGO/ Trust)

Certified that the said Organization is reputed in this field and I/ we recommend the said proposal for getting grant-in-aid from DSTBT, Govt. of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature:

Date:

Name of Recommending Authority:

Designation:

Address:

(Office Seal)

Annexure-I

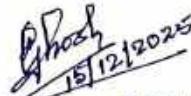
**Proposed Total Budget with break-ups**

A. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	25000
2.	Study materials, Consumables expenses	25000
3.	Hall rent, if any	5000
4.	Publicity materials	7000
5.	Travel expenses	3000
6.	T.A. to the external Resource Persons/ Experts	5000
7.	Documentation expenses including audiovisual	7000
8.	Light refreshments	30000
9.	Auditors' fee	5000
10.	Other expenses, if any (please specify)	3000
Grand Total Expenditure (Rs.):		1,15,000

Please mention:

- B. Institution/ Organization Contribution\* in Rs. 11,500/-
- C. Contribution from any other sources (with name & Address) in Rs. NA
- D. Grant expected from DSTBT (Rs.) = (A-B-C) = Rs. 1,03,500/-

  
Signature of Authorized **PRINCIPAL** seal  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

If C= 0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other sources

Signature of Authorised Personnel with seal

\*At least 10% of the total budget contribution from the Institute/ Organization is desirable.

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number &	1431012100000012
Name of the Account holder/Organisation	
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	7278338064
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J

  
Signature of Authorised Personnel with seal  
**PRINCIPAL**  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

### Annexure III

#### Aims of the Workshop:

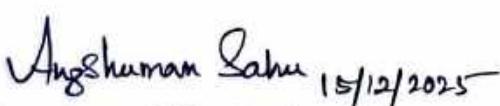
The workshop aims to create awareness and develop scientific understanding of various forms of environmental pollution, with special emphasis on air, water and plastic pollution, and to introduce participants to the concept of sea surface temperature and its role in oceanic pollution and climate change. The programme also aims to encourage sustainable practices and informed decision-making for environmental protection.

#### Objectives of the Workshop

- To develop a comprehensive understanding of environmental pollution, with particular emphasis on air, water and plastic pollution, by examining their sources, characteristics and adverse impacts on human health and ecosystems.
- To familiarize participants with various pollution control strategies and technologies, including regulatory frameworks, mitigation techniques and best practices adopted at local, national and global levels.
- To introduce the concept of Sea Surface Temperature (SST) and explain its scientific basis, methods of observation and its importance in understanding oceanic processes and climate variability.
- To analyze the relationship between sea surface temperature, oceanic pollution and climate change, highlighting how anthropogenic activities influence marine environments and global weather patterns.
- To create awareness about marine and oceanic pollution, including oil spills, chemical contaminants and microplastics, and their long-term ecological consequences on marine biodiversity.
- To encourage critical thinking and scientific inquiry through discussions of real-world case studies, recent research findings and interactive sessions with subject experts.
- To promote environmental consciousness and sustainable practices among participants, motivating them to adopt eco-friendly habits and contribute actively to pollution reduction and environmental conservation.

#### Detailed Programme Schedule:

Day	9:30 am – 10:00 am	10:00 am – 12:00 pm	12:00 pm – 2:00 pm	2:00 pm – 3:00 pm	3:00 pm – 5:00 pm
1	Inauguration	Lecture 1	Lecture 2	Lunch Break	Lecture 3
2	-	Lecture 4	Lecture 5	Lunch Break	Evaluation for issuance of Certificate & Feedback Session

  
15/12/2025  
Signature of the Project Co-ordinator

## ANNEXURE - IV

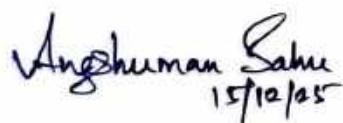
### 2-DAY WORKSHOP SCHEDULE

#### Day 1: 8<sup>th</sup> April 2026 (Wednesday)

Time	Programme	Details
9:30 am – 10:00 am	Inauguration	Welcome Address, Introduction to the Theme of the Workshop, Lighting of Lamp
10:00 am – 12:00 pm	Lecture 1	Air Pollution: Sources, Classification of Pollutants, Health Impacts, Air Quality Index (AQI) and Control Measures
12:00 pm – 2:00 pm	Lecture 2	Water Pollution: Sources of Water Contamination, Industrial & Domestic Effluents, Water Quality Parameters and Treatment Methods
2:00 pm – 3:00 pm	Lunch Break	-
3:00 pm – 5:00 pm	Lecture 3	Plastic Pollution: Types of Plastics, Microplastics, Environmental Impacts, Plastic Waste Management and Sustainable Alternatives

#### Day 2: 9<sup>th</sup> April 2026 (Thursday)

Time	Programme	Details
10:00 am – 12:00 pm	Lecture 4	Sea Surface Temperature (SST): Concept, Measurement Techniques (Satellite & In-situ), Role of SST in Climate and Weather Systems
12:00 pm – 2:00 pm	Lecture 5	Oceanic Pollution: Types, Sources, Marine Pollution Pathways, Impacts on Marine Ecosystems and Biodiversity
2:00 pm – 3:00 pm	Lunch Break	-
3:00 pm – 5:00 pm	Evaluation & Feedback Session	Assessment for Certificate Issuance, Participant Feedback, Interaction, Valedictory Session


  
 Angshuman Sahu  
 15/12/25

Government of West Bengal  
Department of Science & Technology and Biotechnology (DSTBT)  
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1  
Salt Lake, Kolkata-700064

Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): Workshop
2. Title of the proposed Programme: **Two Day's Hand's on Workshop on Solar PhotoVoltaic Power Generation and Utilization**
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community):

\_\_\_\_\_ Research Scholar /College/ University Student.

4. Duration (days): ; Two Days, Tentative Dates of the proposed Programme: 10th - 11th March, 2026
5. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): annexure I
6. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary)

**Dr. Swapna Roy, Electrical Engineering Department, Netaji Subhash Engineering College, Kolkata -700152, 9433144289, swapna.roy@nsec.ac.in**

7. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ IT/ Autonomous body/ registered NGO/ Trust etc.): College.
8. Date wise detail Programme Schedule (attach separate sheet, if necessary): Annexure - II
9. Collaborating Institutions/ Organizations, if any, with their specific contribution: Not Applicable
10. Expected number of participants and list of Resource Persons/ Invited Speakers: 70

.....  
11. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of UC, Audited SoE, Report etc.: No.

12. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant:

**Responsible Person: Dr. Swapna Roy, Electrical Engineering Department, Netaji Subhash Engineering College**

13. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):135000

D : =135000 = (A: 150000 - B: 15000) C=0:  
(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

Government of West Bengal  
Department of Science & Technology and Biotechnology (DSTBT)  
Vigyan Chetana Bhavan, Block-DD, Plot-26/B, Sector-1  
Salt Lake, Kolkata-700064

#### Application Format for Science Popularization Programme

1. Programme Type (ref SN 11 of the Memorandum): Workshop
2. Title of the proposed Programme: **Two Day's Hand's on Workshop on Solar PhotoVoltaic Power Generation and Utilization**
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community):

Research Scholar /College/ University Student.

4. Duration (days): ; Two Days, Tentative Dates of the proposed Programme: 10th - 11th March, 2026

5. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): To Give exposure to Engineering Student about the Future alternative of conventional power and Solar Industry

6. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary)

**Dr. Swapna Roy, Electrical Engineering Department, Netaji Subhash Engineering College, Kolkata -700152**

7. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ IT!/ Autonomous body/ registered NGO/ Trust etc.): College.

8. Date wise detail Programme Schedule (attach separate sheet, if necessary): Annexure - II

9. Collaborating Institutions/ Organizations, if any, with their specific contribution: **Not Applicable**

10. Expected number of participants and list of Resource Persons/ Invited Speakers: **70**

11. Give details of the grant received from DSTBT in last three Financial Years, if any along with the date of submission of IUC, Audited SoE, Report etc.; No.

12. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant:

Responsible Person: Dr. Swapna Roy, Electrical Engineering Department, Netaji Subhash Engineering College

13. Total Estimated Expenditure (A)/ Organisation's contribution (B)/ Contribution from any other sources (C) / Grant expected from DSTBT(D):135000

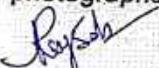
D := 135000 = (A: 150000 - B: 15000) C=0;

Check List (put tick) of attachments to be submitted with the application

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: YES/NO
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): YES/NO
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: YES/NO

DECLARATION

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.

Signature: 

Date: 15/12/2025

Name of Programme Coordinator:

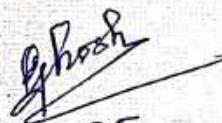
Dr. Swapna Ray

Designation: Associate Professor

Address: NSEC, Garia,

Kolkata - 700152

(Office Seal)

Signature: 

Date: 15/12/2025

PRINCIPAL

Netaji Subhash Engineering College

Techno City, Garia, Kolkata-700152

West Bengal, India

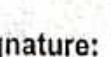
Designation:

Address:

RECOMMENDATION

(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and I/ we recommend the said proposal for getting grant-in-aid from DSTBT, Govt of West Bengal for the benefit of the local College/ University Students/ Community etc.

Signature: 

Date:

Name of Recommending Authority:

Designation:

(Office Seal)

Address:

Annexure-I

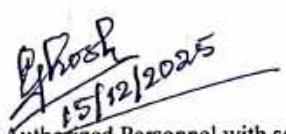
## Proposed Total Budget with break-ups

## A. Total Estimated Expenditure

SI. No.	Items required with justification and rate	Total Expenditure (A) (Rs.)
1.	Honorarium to Resource Persons/ Experts	30000
2.	Study materials, Consumables expenses	20000
3.	Hail rent, if any	3000
4.	Publicity materials	5000
5.	Travel expenses	30000
6.	T.A. to the external Resource Persons/ Experts	5000
7.	Documentation expenses including audiovisual	5000
8.	Light refreshments	40000
9.	Auditors' fee	7000
10.	Other expenses, if any (please specify) Miscelinious	5000
Grand Total Expenditure (Rs.):		150000

Please mention:

- B. Institution/ Organization Contribution\* in Rs.15000/-
- C. Contribution from any other sources (with name & Address) in Rs.0
- D. Grant expected from DSTBT (Rs.) = (A-B-C) = 135000.


  
Signature of Authorized Personnel with seal

If C= 0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other

**PRINCIPAL**  
**Netaji Subhash Engineering College**  
**Techno City, Garia, Kolkata-700152**  
**West Bengal, India**

Signature of Authorised Personnel with seal

\*At least 10% of the total budget contribution from the Institute/ Organization is desirable.

Annexure-II

Bank details of the Applicant Organisation

Name of the Organisation	Netaji Subhash Engineering College
Bank Account number & Name of the Account holder/Organisation	1431012100000012
Type of Account (Savings or Current A/x)	Current
Name of the Bank	Punjab national bank
Name of the Branch with Branch Address	NSECollege branch, Techno city, Garia, P.O.- Panchpota, Kolkata-700152
IFSC of the Branch	PUNB488500
Mobile number of the Programme Coordinator/ Head of the Organisation	9433144289
PAN /tan OF THE Account holder / Organisation	PAN AAATT8588J

  
Signature of Authorised Personnel with seal  
15/12/2025

**PRINCIPAL**  
Netaji Subhash Engineering College  
Techno City, Garia, Kolkata-700152  
West Bengal, India

**Annexure - III****Detailed Program Schedule:**

	10.00 AM	11.00 AM-12 AM	12.00 NOON	Lunch	2.00 - 3PM	3.00 - 5 PM
Day 1	Inauguration	Session 1	Session 2		Session 3	Session 4
Day 2		Power plant Visit			Session 5	Valedictory & Certificate Distribution