



SurTech

**DR. SUDHIR CHANDRA SUR INSTITUTE OF
TECHNOLOGY AND SPORTS COMPLEX**

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata -
700074 Website: www.surtech.edu.in, Email: info@dsec.ac.in

Affiliated to Maulana Abul Kalam Azad University of Technology West
Bengal, WBCTVESD and Approved by AICTE

ANNUAL REPORT

2024-25

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Message from Managing Director



Sardar Taranjit Singh

In its broadest meaning, education is any act or experience that shapes a person's mind, character, or physical abilities. Technically, education is the deliberate transmission of society's acquired knowledge, skills, and values from generation to generation. Thus, education is the basic fulcrum that drives societal growth.

The quality of education is clearly the priority in this era of globalization. Quality is not a single metric.

A good educational institution works to maintain and improve quality in all areas of operation.

I believe that a teacher may shape an educated and socially responsible human being by instilling two traits in students: curiosity and determination. Second, a teacher's noble life becomes a light for students when they establish strong values and put them into practice.

SurTech's objective to provide the best studying, teaching, and research possibilities for students and academics is to provide students with modern knowledge and strong values.

Our students find the thrill and rigor of new discoveries, and develop skills of investigation, evaluation, and communication that will serve them well in their jobs and lives.

Students' creativity, teamwork, and international competition thrive. SurTech is committed to academic independence and cultural diversity to attract students and teachers.

At Dr. Sudhir Chandra Sur Institute of Technology & Sports Complex (SurTech), we try to establish an environment that inspires personal and professional progress. Our efforts are focused on recognizing and understanding human talent and enthusiasm. SurTech is thus about "how we can best educate our students to confront the future's challenges".

With a 160-year tradition of academic achievement, scientific advancements, and high-tech innovation. I urge you to seize this fantastic chance and join us actively contributing to the globalization of our society.

With these remarks, I welcome everyone to SurTech and wish them every success on their new adventure with us.

Sardar Taranjit Singh
MD, JIS Group

Message from Principal



Prof. (Dr.) Saradindu Panda

I am honoured and greatly privileged to lead Dr. Sudhir Chandra sur Institute of Technology and Sports Complex (SurTech) and continue the ambitious strategy of addressing the challenges and opportunities of the future to benefit our communities more widely.

On the global platform, India has the responsibility of transforming itself into a developed nation with a strong ethical system- this; however, is a great challenge, as this can only be achieved through the youth of today who have the power of ideas, ambition, ability and most importantly passion.

I believe passionately that we are all born with tremendous capabilities, but unfortunately, we lose these as time goes by and ironically this can be directly attributed to the current system of education which stifles the creative senses rather than enhancing it.

Stepping into the JIS Group of Institutions is stepping into a brighter world of education and a knowledge hub. It is worthwhile to take advantage of the opportunity to see the difference and enjoy the "joy of learning."

Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex (Formerly known as Dr. Sudhir Chandra Sur Degree Engineering College) is one of India's top educational institutions, providing high-quality education to students with the goal of becoming a world-class technical education and scientific research institution.

Since its inception in 2009, SurTech under the aegis of JIS Group has continued in subtle ways to pour fresh knowledge, human capital, and innovation into the engines of our society and nurturing a new generation of young professionals who are prepared to face the ever-changing social, economic, and technological landscape of our country in order to build a more inclusive and sustainable society on a national and international scale.

Over the last decade, the Institute has evolved into a strong blend of cutting-edge infrastructure and tightly connected human resources dedicated to providing professional education with a focus on creativity and innovation.

In a short span SurTech has become an ensemble of a multi-layered educational system which covers all aspects of diploma, under-graduate and postgraduate education with smartly crafted and industry compliant course curricula using state-of-art infrastructure in a climate of possibility and transform lives and enhance communities.

The research activities of our faculty lead to an extraordinary enrichment of the experience of our students that is realized at both the graduate and undergraduate levels. The research training provided to our graduate students creates the next generation of scholars well-prepared to advance knowledge and transfer technology. The extension of research opportunities to an ever-increasing group of undergraduate students adds a dimension of experience to the undergraduate education that simply cannot be duplicated in the classroom.

SurTech heralds the latest and newest but never allows itself to be consumed by the intellectual fads of the day. Our graduates are smart, collaborative and entrepreneurial. They use the creative space of SurTech to actualize their potential. We are encouraging entrepreneurship and innovation on the campus.

We are facilitating campus recruitments and connecting our students to the world. The College strives for quality in training to instill a feeling of professional responsibility, social and cultural awareness, and to prepare students for leadership roles.

Campus life here emphasises the value of extracurricular activities in addition to academic learning, exposing students to a variety of fresh opportunities. All of this contributes to our student's development as a thoroughbred professional, well-suited to contribute to his chosen field while keeping an open mind to new ideas and concepts in industrial and technical breakthroughs through conducting Guest Lectures, Industrial Visits, Vocational Training (internships), student chapters of international professional groups, sponsored projects, and other means, students are able to meet with industry experts.

I can say with legitimate pride that the College has achieved far more than just the modest target set at the time of its inception by producing a trained human resource to serve the country in all walks of life and by contributing to the knowledge base.

I am glad to have this opportunity to serve as the Principal of this glorious institution. SurTech pledges to the state, the nation and the world that our endeavours will benefit all citizens. I invite you to join and strengthen this venture.

Prof. (Dr.) Saradindu Panda

PhD-Tech (NIT, DGP), M.Tech (VLSI, J.U), BE (UIT, BU) Vice Chair, IEEE
CASS Kolkata Section IQAC Member of Swami Vivekananda College,
Rahara, Ramakrishna Mission MIEEE, MIASSE, MIEI, MIETE, MIAENG,
MCSTA, MIREd, MIAE, MITEEA

Vision and Mission of the Institute

Vision of the Institute

To be a top global technology institute that creates leaders & innovators and generates new knowledge for society & industry via transformative education.

Mission of the Institute

- **Excellence in Education:** Education of world-class quality, based on ethics and critical thinking, for the betterment of life.
- **Innovative Research:** An innovation ecosystem to advance knowledge and tackle pressing issues.
- **Impactful People:** Happy, accountable, compassionate, and effective employees and pupils
- **Productivity Enhancement:** Active engagement with national and international companies, as well as institutions, in order to increase productivity and economic development.
- **Service to Society:** Providing knowledge and compassion to the region and the planet.

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Awards & Association 2024-25

Awards & Association



Providing Professional Education

"Uttoron" Academic Excellence



Academic Excellence till 2025

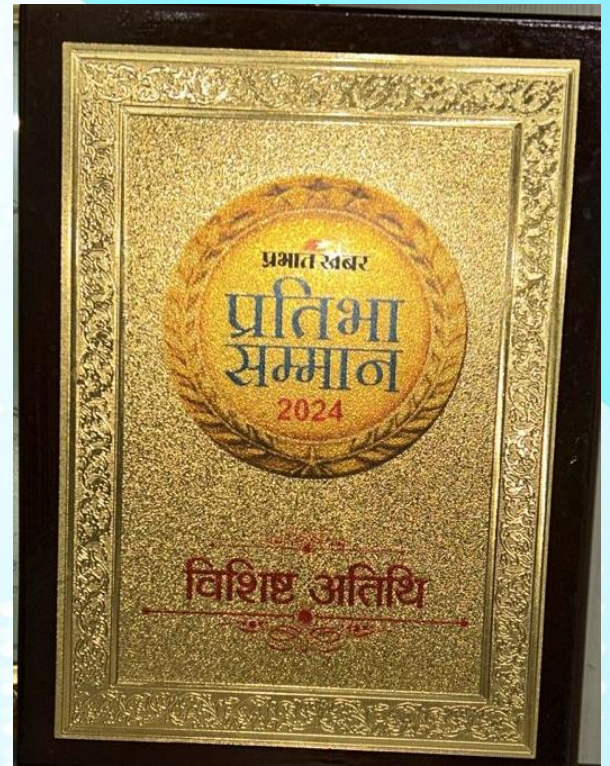


Eat Right Campus

Awards & Association



“Sikkhar Gourab” Academic Excellence



“Protima Samman” 2024



“Uttoron” Academic Excellence



“Bidhyang Dehi” 2025

Achievements & Recognition



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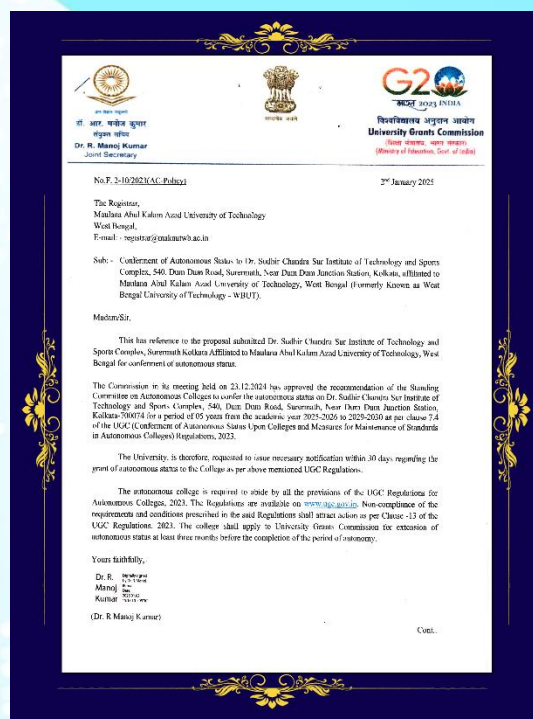
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Achievements & Recognition 2024-25

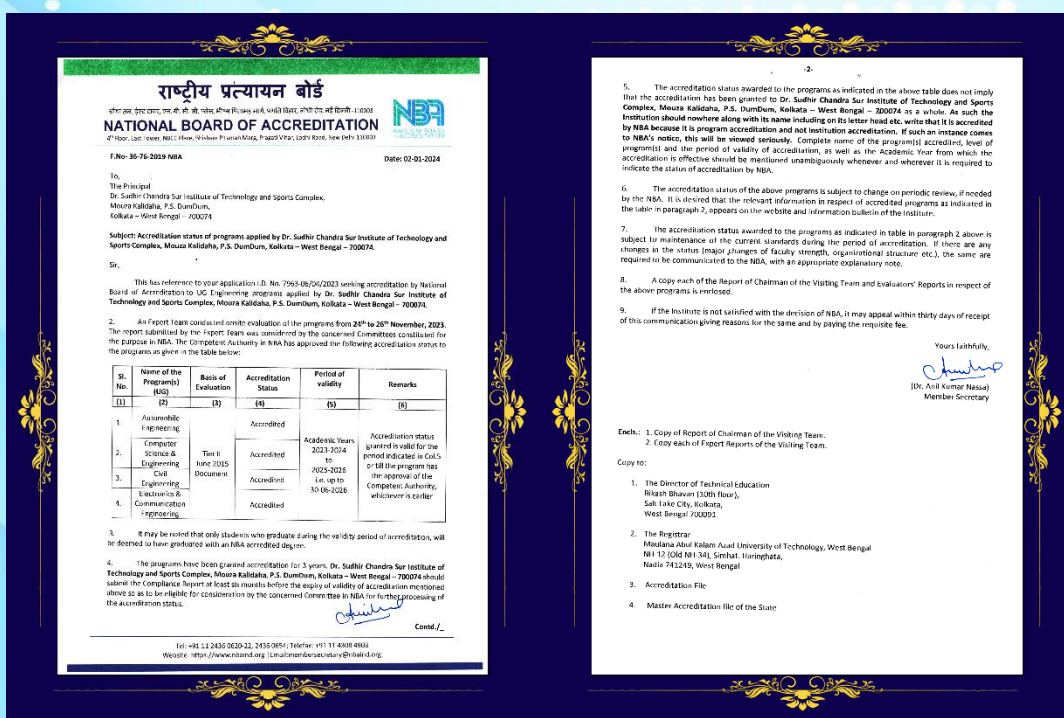
Achievements & Recognition



NAAC “A”, Accredited




Conferred Autonomous Status from
Academic Year **2025-2026 to 2029-2030**




4 UG Programs are NBA Accredited i.e. **AUE, CSE, CE, ECE**
for the Academic Year **2023-24 to 2025-26**

Achievements & Recognition



Dr. Sudhir Chandra Sur Institute
of Technology & Sports Complex
JIS GROUP


**Dr. Sudhir Chandra Sur Institute
of Technology and Sports Complex**
Achieves Prestigious

NAAC 'A' 

Grade Accreditation

Study in one of the best
Autonomous institute under
MAKAUT in West Bengal

Setting New Benchmarks in
Quality Education



www.jisgroup.org

www.surtech.edu.in



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Events 2024-25

Events Organized

WEBINAR/SEMINAR/WORKSHOP SESSION ORGANIZED

Sl. No.	Event Title	Type of Event (Conference, Workshop, FDP, Webinar)	Dates of the Event	Location (Online/Offline, Venue)	Department
1	Webinar session on "Structural health monitoring (SHM) using artificial intelligence (AI)"	Webinar	30.08.2024	Online	Department of CE
2	Seminar session on "Sustainable Ground Improvement Techniques by Adopting Ecofriendly Natural Geotextiles with Some Case Studies"	Seminar	13.09.2024	Offline	Department of CE
3	Seminar session on study abroad benefits and the way for it	Seminar	18.09.2024	Offline	Department of CE
4	Webinar Session on Alumni Talk "An Experimental Investigation on Hot Mix Asphalt Using Hydrated Lime"	Webinar	30.09.2024	Online	Department of CE
5	Workshop Session on How to Prevent yourself from Financial Frauds	Workshop	29.10.2024	Offline	Department of CE
6	Webinar session on "Celebration of 25th GIS Day."	Webinar	20.11.2024	Online	Department of CE
7	Workshop on "IMPORTANCE OF BIM SOFTWARES IN CIVIL ENGINEERING"	Workshop	11.11.2024	Offline	Department of CE
8	Virtual Workshop session on "Structural Design and Analysis with ETABS"	Workshop	22.11.2024	Offline	Department of CE
9	Road Map to Higher Study	Seminar	26.07.2024	Offline	CSE and CSE (AIML)
10	Emerging Technology of 2024	Seminar	31.07.2024	Offline	CSE and CSE (AIML)
11	Current technology trends, database connectivity, real life software and deployment of a project	Industry Visit	22.08.2024	Offline	CSE and CSE (AIML)
12	Current technology trends, database connectivity, real life software and deployment of a project	Industry Visit	23.08.2024	Offline	CSE and CSE (AIML)
13	Innovations in Software Architecture and Computational Systems	International Conference	13-14.11.2024	Hybrid	CSE and CSE (AIML)
14	Seminar session on "Automotive Safety"	Seminar	19.09.2024	Offline	Department of AUE
15	Academia & Industrial Summit	Academia & Industrial Summit	08.11.2024	Offline	Department of AUE

Events Organized

Sl. No.	Event Title	Type of Event (Conference, Workshop, FDP, Webinar)	Dates of the Event	Location (Online/Offline, Venue)	Department
16	5 Days Workshop on Vehicle Maintenance	Workshop	18.11.2024 - 22.11.2024	Offline	Department of AUE
17	Alumni Talk on 'Aspiring to Inspire'.	Alumni Talk	12-08-2024	Offline	Department of ECE
18	OBSERVATION OF CHANDRAYAN 2 LAUNCH	Seminar	22nd July 2024	Offline	Department of ECE
19	at ATS (Air Traffic System), Netaji Subhas Chandra Bose International Airport, Kolkata	Industry Visit	21st and 22nd November, 2024	Offline	Department of ECE
20	WORKSHOP ON IOT	Workshop	18th November 2024	Offline	Department of ECE
21	seminar on "Rapid Prototyping and changes in current trend for Product development in Industry"	Seminar	10th February 2025	Offline	Department of ECE
22	International Conference on "Recent Developments and Applications in Materials Science and Engineering (RDAMSE 2025)".	International Conference	30-31 January, 2025	Hybrid	BSH
23	"Advances in Materials Science for Sustainable Development and Industrial Applications".	AICTE Sponsored 6 days Online ATAL FDP	10-15 February, 2025	Online	BSH
24	E-Mobility Synergy 2025	Meeting	11th April, 2025	Offline	SurTech
25	At Electro Trans Industries Pvt Ltd, Konnagar, Hooghly	Industry Visit	18.11.2024	Offline	Department of Electrical Engineering
26	At Ardent Computech Pvt Ltd, SDF Building, Salt Lake, Kolkata	Industry Visit	22.11.2024	Offline	Department of Electrical Engineering
27	One Day Entrepreneurship Awareness Programme (EAP)	Seminar	12.02.2025	Offline	Department of Electrical Engineering
28	At WBSEDCL 33kV/11kV Substations, Newtown Action Area 1B	Industry Visit	25.02.2025	Offline	Department of Electrical Engineering
29	At Binay Udyog Private Limited (BPL), Jagacha, Howrah – 711302	Industry Visit	19.03.2025	Offline	Department of Electrical Engineering
30	One-Day Workshop on Industrial Electrical Practices	Workshop	19.05.2025	Offline	Department of Electrical Engineering

Events (FDP/MDP)

Sl. No.	Year	Name of the participant	Designation	Title of the FDP /MDP/ professional development / administrative training program	Dates (from-to) (DD-MM-YYYY)	Department
1	2024-2025	KRISHNENDU KUNDU	ASSISTANT PROFESSOR	WASTE TO WEALTH INNOVATION	02-12-2024 to 07-12-2024	CE
2	2024-2025	KRISHNENDU KUNDU	ASSISTANT PROFESSOR	Sustainable and Resilient Infrastructure Development Using Advanced Materials and Technology	16-12-2024 to 20-12-2024	CE
3	2024-2025	KRISHNENDU KUNDU	ASSISTANT PROFESSOR	Building Skills for Advanced Cognitive Assessment	03/03/2025 to 07/03/2025	CE
4	2024-2025	KRISHNENDU KUNDU	ASSISTANT PROFESSOR	Bridging Research & Funding: Unlocking Grants for Industry & Academia,"	07/04/2025 to 11/04/2025	CE
5	2024-2025	Dr. Anirban Neogi	ASSISTANT PROFESSOR	"Computational Tools on Engineering And Research: Issues and Challenges"	18/11/2024 to 22/11/2024	ECE
6	2024-2025	Dr. Anirban Neogi	ASSISTANT PROFESSOR	FDP Building Skills for Advanced Cognitive Assessment from March 03-07, 2025	03/03/2025 to 07/03/2025	ECE
7	2024-2025	Prof. (Dr.) Soumitra Roy	Professor	"Mastering Machine Learning with R:Advancement Applications and Techniques fostering Career Development"	19/08/2024-23/08/2024	CSE
8	2024-2026	Prof. (Dr.) Soumitra Roy	Professor	FDP Building Skills for Advanced Cognitive Assessment from March 03-07, 2025	03/03/2025 to 07/03/2025	CSE
9	2024-2025	Dr. Arpita Chatterjee	ASSISTANT PROFESSOR	Building Skills for Advanced Cognitive Assessment	03/03/2025 to 07/03/2025	ME
10	2024-2025	Dr. Arpita Chatterjee	ASSISTANT PROFESSOR	Advances in Materials Science for Sustainable Development and Industrial Applications	10/02/2025 to 15/02/2025	ME
11	2024-2025	Dr. Pradipta Maiti	ASSISTANT PROFESSOR	Industry 4.0: Control System for Robotics and Automation	24/02/2025 - 28/02/2025	EC
12	2024 - 2025	Mr. Kalyan Mukherjee	Assistant Professor	Advances in Materials Science for Sustainable Development and Industrial Applications	10/02/2025 - 15/02/2025	AUE
13	2024 - 2025	Mr. Kalyan Mukherjee	Assistant Professor	Building Skills for Advanced Cognitive Assessment	03/03/2025 - 07/03/2025	AUE
14	2024 - 2025	Mr. Kalyan Mukherjee	Assistant Professor	Digital Manufacturing Technology	02/12/2024 - 07/12/2024	AUE
15	2024 - 2025	Mr. Kalyan Mukherjee	Assistant Professor	Industry 4.0 - Research & Applications Perspective	16/12/2024 - 21/12/2024	AUE
16	2024 - 2025	Mr. Pritam Bhattacharjee	Assistant Professor	Advances in Materials Science for Sustainable Development and Industrial Applications	10/02/2025 - 15/02/2025	AUE
17	2024 - 2025	Mr. Pritam Bhattacharjee	Assistant Professor	Building Skills for Advanced Cognitive Assessment	03/03/2025 - 07/03/2025	AUE
18	2024 - 2025	Mr. Pritam Bhattacharjee	Assistant Professor	Digital Manufacturing Technology	02/12/2024 - 07/12/2024	AUE
19	2024 - 2025	Mr. Pritam Bhattacharjee	Assistant Professor	Industry 4.0 - Research & Applications Perspective	16/12/2024 - 21/12/2024	AUE
20	2024 - 2025	Mr. Pritam Bhattacharjee	Assistant Professor	Bridging Research & Funding - Unlocking Grants for Industry & Academia	07/04/2025 - 11/04/2025	AUE

Events (FDP/MDP)

21	2024 - 2025	Mr. Shankha Ghosh	Assistant Professor	Advances in Materials Science for Sustainable Development and Industrial Applications	10/02/2025 - 15/02/2025	AUE
22	2024 - 2025	Mr. Shankha Ghosh	Assistant Professor	Bridging Research & Funding - Unlocking Grants for Industry & Academia	07/04/2025 - 11/04/2025	AUE
23	2024 - 2025	Mr. Shankha Ghosh	Assistant Professor	Building Skills for Advanced Cognitive Assessment	03/03/2025 - 07/03/2025	AUE
24	2024 - 2025	Mr. Shankha Ghosh	Assistant Professor	Digital Manufacturing Technology	02/12/2024 - 07/12/2024	AUE
25	2024 - 2025	Mr. Shankha Ghosh	Assistant Professor	Industry 4.0 - Research & Applications Perspective	16/12/2024 - 21/12/2024	AUE
26	2024 - 2025	Mr. Shankha Ghosh	Assistant Professor	Sustainable Manufacturing and Advanced automation in Industries	24/02/2025 - 01/03/2025	AUE
27	2024 - 2025	Dr. Hrishiraj Ranjan	Assistant Professor	Building Skills for Advanced Cognitive Assessment	03/03/2025 - 07/03/2025	AUE
28	2024 - 2025	Dr. Hrishiraj Ranjan	Assistant Professor	Bridging Research & Funding - Unlocking Grants for Industry & Academia	07/04/2025 - 11/04/2025	AUE
29	2024-2025	Mr. Prathita Roy	ASSISTANT PROFESSOR	The Revolution of Large Language Models (LLMs) in Artificial Intelligence	18/11/2024 to 23/11/2024	EE
30	2024-2025	Mr. Prathita Roy	ASSISTANT PROFESSOR	Advances in Materials Science for Sustainable Development and Industrial Applications	10/02/2025 to 15/02/2025	EE
31	2024-2025	Mr. Prathita Roy	ASSISTANT PROFESSOR	Building Skills for Advanced Cognitive Assessment	03/03/2025 to 07/03/2025	EE
32	2024-2025	Mr. Prathita Roy	ASSISTANT PROFESSOR	Bridging Research & Funding: Unlocking Grants for Industry & Academia	07/04/2025 to 11/04/2025	EE
33	2024-2025	Dr.Rumrum Banerjee	ASSISTANT PROFESSOR	The Revolution of Large Language Models (LLMs) in Artificial Intelligence	18/11/2024 to 23/11/2024	EE
34	2024-2025	Dr.Rumrum Banerjee	ASSISTANT PROFESSOR	Advances in Materials Science for Sustainable Development and Industrial Applications	10/02/2025 to 15/02/2025	EE
35	2024-2025	Dr.Rumrum Banerjee	ASSISTANT PROFESSOR	Building Skills for Advanced Cognitive Assessment	03/03/2025 to 07/03/2025	EE
36	2024-2025	Dr.Rumrum Banerjee	ASSISTANT PROFESSOR	Bridging Research & Funding: Unlocking Grants for Industry & Academia	07/04/2025 to 11/04/2025	EE
37	2024-2025	Dr.Debabrata Das	ASSISTANT PROFESSOR	Bridging Research & Funding: Unlocking Grants for Industry & Academia	07/04/2025 to 11/04/2025	ME
38	2024-2025	Dr.Debabrata Das	ASSISTANT PROFESSOR	Industry 4.0 and Smart Manufacturing: Transforming Traditional Practices	03/02/2025 to 08/02/2025	ME
39	2024-2025	Dr.Debabrata Das	ASSISTANT PROFESSOR	Digital Manufacturing & Design Technology	09/12/2024 to 14/12/2024	ME
40	2024-2025	Dr.Debabrata Das	ASSISTANT PROFESSOR	Building Skills for Advanced Cognitive Assessment	09/12/2024 to 13/12/2024	ME

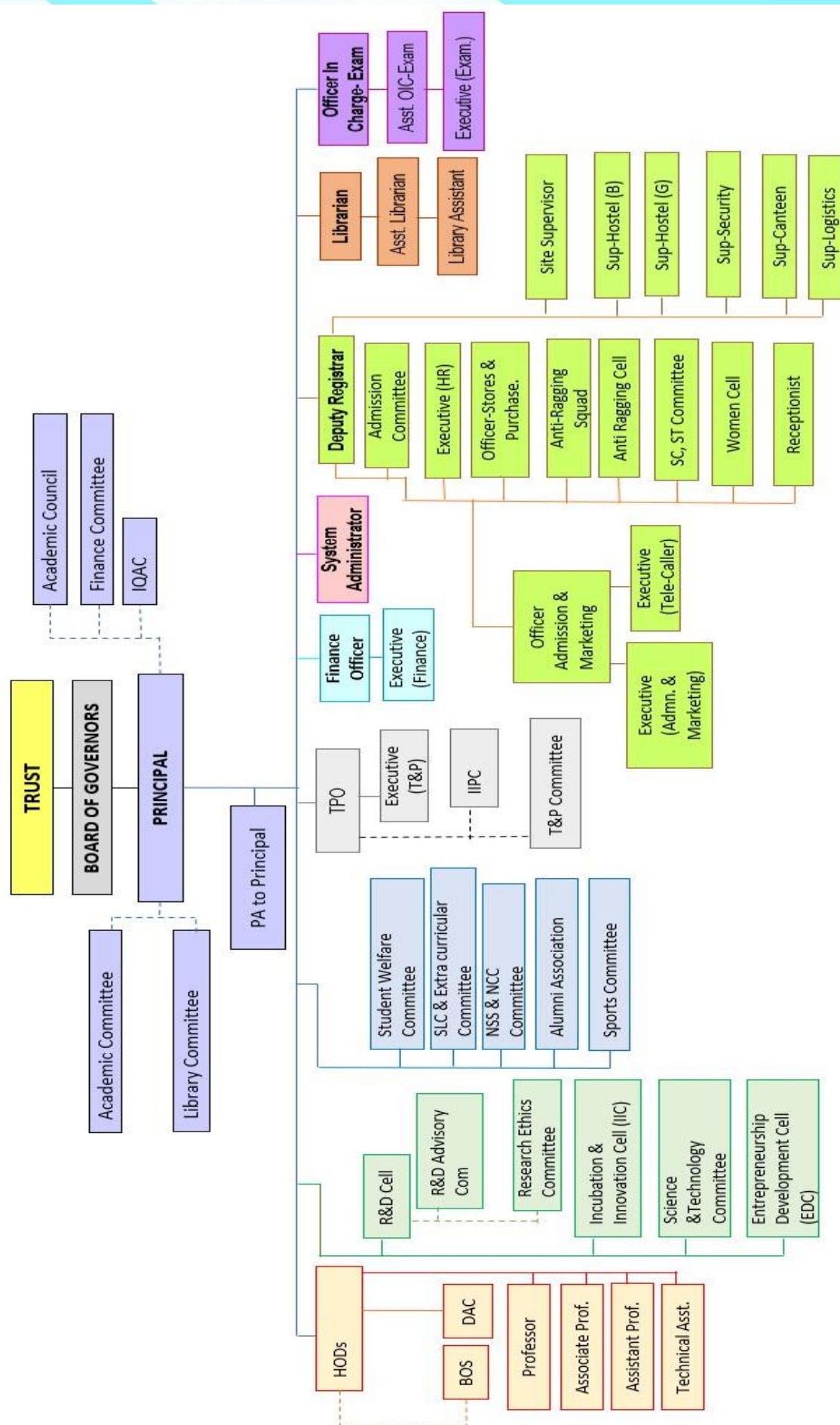
Events (FDP/MDP)

41	2024-2025	Mr. Subhasish halder	Assistant Professor	Pedagogy and Research Methods	25/11/2024 to 29/11/2024	ME
42	2024-2025	Mr. Subhasish halder	Assistant Professor	Industry 4.0 and Smart Manufacturing: Transforming Traditional Practices	03/02/2025 to 08/02/2025	ME
43	2024-2025	Mr. Subhasish halder	Assistant Professor	Advances in Materials Science for Sustainable Development and Industrial Applications	10/02/2025 to 15/02/2025	ME
44	2024-2025	Mr. Subhasish halder	Assistant Professor	Building Skills for Advanced Cognitive Assessment	03/03/2025 to 07/03/2025	ME
45	2024-2025	Mrs. Mousumi Ojha	Assistant Professor	Building Services in Smart City Through IoT-Edge-Fog-Cloud Federation	09/12/2024 to 14/12/2024	CSE
46	2024-2025	Mrs. Mousumi Ojha	Assistant Professor	Emerging Technologies and Security Recent Trends	11/11/2024 to 15/11/2024	CSE
47	2024-2025	Mrs. Mousumi Ojha	Assistant Professor	AICTE Training And Learning (ATAL) Academy Faculty Development Program on Building the Next Wave of Indian Startups with Advanced Computing Technologies	06/01/2025 to 11/01/2025	CSE
48	2024-2025	Mrs. Mousumi Ojha	Assistant Professor	Intelligent Computing Techniques and Its Engineering Applications (ICTEA-2025)	06/01/2025 to 11/01/2025	CSE
49	2024-2025	Mrs. Mousumi Ojha	Assistant Professor	RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING	19/05/2025 to 25/05/2025	CSE
50	2024-2025	Ms. Sayani Roy	Technical Assistant	Digital Proficiency Bootcamp (MDP)	11/07/2024 to 15/07/2024	CSE
51	2024-2025	Ms. Sayani Roy	Technical Assistant	RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING	19/05/2025 to 25/05/2025	CSE
52	2024-2025	Ms. Sayani Roy	Technical Assistant	Bridging Research & Funding: Unlocking Grants for Industry & Academia	07/04/2025 - 11/04/2025	CSE
53	2024-2025	Mr. Sandip Bhadra	Technical Assistant	Digital Proficiency Bootcamp (MDP)	11/07/2024 to 15/07/2024	AUE
54	2024-2025	Mr. Sandip Bhadra	Technical Assistant	Sustainable Engineering for Future Infrastructure	11/02/2025 to 15/02/2025	AUE
55	2024-2025	Mr. Sandip Bhadra	Technical Assistant	Bridging Research & Funding: Unlocking Grants for Industry & Academia	07/04/2025 - 11/04/2025	AUE
56	2024-2025	Mr. Jayanta Si	Technical Assistant	Digital Proficiency Bootcamp (MDP)	11/07/2024 to 15/07/2024	AUE
57	2024-2025	Mr. Jayanta Si	Technical Assistant	Bridging Research & Funding: Unlocking Grants for Industry & Academia	07/04/2025 - 11/04/2025	AUE
58	2024-2025	Mr.Somnath Dasgupta	Assistant Professor	Faculty Development Program on "RESEARCH METHODOLOGY" organized by Department ofCommerce, PPG College of Arts and Science,	12/12/2025- 19/12/2025	ECE
59	2024-2025	Mr.Somnath Dasgupta	Assistant Professor	FDP Building Skills for Advanced Cognitive Assessment	03/03/2025 to 07/03/2025	ECE
60	2024-2025	Mr.Somnath Dasgupta	Assistant Professor	Faculty Development Program on Advancing Energy Transition: Strategies for Sustainability and Climate Resilience	25/11/2024 to 30/11/2024	ECE

Events (FDP/MDP)

61	2024-2025	Mr.Somnath Dasgupta	Assistant Professor	Faculty Development Program on Advancing Semiconductor Packaging Technology	30/06/2025 to 10/07/2025	ECE
62	2024-25	Dr. Dipankar Das	Assistant Professor	Explainable AI in Healthcare	01/07/2024-05/07/2025	BSH
63	2024-25	Dr. Dipankar Das	Assistant Professor	Innovation in Emerging Field	15/07/2024-19/07/2025	BSH
64	2024-25	Dr. Dipankar Das	Assistant Professor	"Mastering Machine Learning with R:Advancement Applications and Techniques fostering Career Development"	19/08/2024-23/08/2025	BSH
65	2024-25	Dr. Dipankar Das	Assistant Professor	Advancing Energy Transition: Strategies for Sustainability and Climate Resilience	25/11/2024-30/11/2024	BSH
66	2024-25	Dr. Dipankar Das	Assistant Professor	Building Skills for Advanced Cognitive Assessment	03/03/2025-07/03/2025	BSH
67	2024-25	Dr. Dipankar Das	Assistant Professor	Emerging Trends in Research and its Application in Engineering' ETRA-E-2025	26/05/2025-30/05/2025	BSH
68	2024-25	Dr. Dipankar Das	Assistant Professor	Advances in Materials Science for Sustainable Development and Industrial Applications	10/02/2025-15/02/2025	BSH
69	2024-25	Souvik Chakraborty	Assistant Professor	Sustainable Engineering Practices: Integrating Energy Efficiency and Climate Change Resilience	16/12/2024-21/12/20-24	CE
70	2024-25	Souvik Chakraborty	Assistant Professor	Emerging Technologies in Power Energy: Shaping the Future of Sustainable Solutions	19/11/2024-23/11.2024	CE
71	2024-25	Souvik Chakraborty	Assistant Professor	"Bridging Research & Funding: Unlocking Grants for Industry & Academia, Research Methodology & Research Paper,Writing in Management and Social Sciences	07/04/2025-11/04/2025	CE
72	2024-25	Souvik Chakraborty	Assistant Professor	Advances in Materials Science for Sustainable Development and Industrial Applications	04/11/2024-08/11/2024	CE
73	2024-25	Souvik Chakraborty	Assistant Professor	"Recent"Advances in Civil Engineering" (RACE-2025)	10/02/2025-15/02/2025	CE
74	2024-25	Souvik Chakraborty	Assistant Professor	WASTE TO WEALTH INNOVATION	07/07/2025-11/07/2025	CE
75	2024-25	Sourav Kumar Singha	Assistant Professor	Advancing Energy Transition: Strategies for Sustainability and Climate Resilience	02/12/2024 - 07/12/2024	CE
76	2024-25	Sourav Kumar Singha	Assistant Professor	Sustainable and Resilient Infrastructure Development Using Advanced Materials and Technology	25/11/2024 - 30/11/2024	CE
77	2024-25	Sourav Kumar Singha	Assistant Professor	Bridging Research & Funding: Unlocking Grants for Industry & Academia	16/12/2024 - 20/12/2024	CE
78	2024-25	Sourav Kumar Singha	Assistant Professor	Research Methodology and Effective Teaching Learning Process	07/04/2025 - 11/04/2025	CE
79	2024-25	Sourav Kumar Singha	Assistant Professor		09/06/2025 - 13/06/2025	CE

Institutional Organogram



Administrative Heads



Prof. (Dr.) Saradindu Panda
Principal
Dr. Sudhir Chandra Sur Institute of
Technology and Sports Complex



Dr. Soumen Basu
Adviser & Registrar
Dr. Sudhir Chandra Sur Institute of
Technology and Sports Complex



Mr. Sanjay Bhattacharjee
Controller of examination
Dr. Sudhir Chandra Sur Institute of
Technology and Sports Complex

Departmental Heads

Serial No.	Name	Designation	Name of the Department
1	Dr. Hrishiraj Ranjan	Assistant Professor	AUE
2	Dr. Amrut Ranjan Jena	Professor	CSE
3	Dr. Arpita Chatterjee	Assistant Professor	ME
4	Dr. Anirban Neogi	Associate Professor	ECE
5	Dr. Dipankar Das	Professor	BSH
6	Dr. Sayantan Chakraborty	Associate Professor	EE
7	Dr. Arijit Acharjya	Professor	CE

Admission Report

Programme Name	Programme Code	No. of seats sanctioned	No. of Students Admitted
B.Tech. Computer Science and Engineering	CSE(001)	240	227
B.Tech. Electronics & Communication Engineering	ECE(003)	60	59
B.Tech. Electrical Engineering	EE(016)	30	19
B.Tech. Civil Engineering	CE(013)	60	58
B.Tech. Mechanical Engineering	ME(007)	30	21
B.Tech. Automobile Engineering	AUE(032)	60	51
B.Tech. Computer Science and Engineering (Artificial Intelligence And Machine Learning)	CSE(AI&ML)	60	60
B.Tech. Computer Science and Engineering (Data Science)	CSE- Data Science	60	55
B.Tech. Computer Science and Engineering (Cyber Security)	CSE-Cyber Security	60	54
Electronics and Computer Science	ECS	60	31
B.Tech. Computer Science and Engineering (Lateral Entry)	CSE (Lateral Entry) 001	18	14
B.Tech. Electronics & Communication Engineering (Lateral Entry)	ECE (Lateral Entry) 003	6	6
B.Tech. Electrical Engineering (Lateral Entry)	EE (Lateral Entry) 016	3	14
B.Tech. Civil Engineering (Lateral Entry)	CE (Lateral Entry) 013	6	7
B.Tech. Mechanical Engineering (Lateral Entry)	ME (Lateral Entry) 007	3	10
B.Tech. Automobile Engineering (Lateral Entry)	AUE (Lateral Entry) 032	6	10
B.Tech. Computer Science and Engineering (Artificial Intelligence And Machine Learning)	CSE-AI & ML (Lateral Entry)	6	6
M.Tech. Mechanical Engineering	M.Tech. ME(124)	18	18
M.Tech. Communication Engineering	M.Tech. ECE(705)	9	5
M.Tech. Structural Engineering	M.Tech. SE	18	18

Scholarship

SCHOLARSHIP SCHEME 2024-25 (Provided by the Institute)

Alumni Scholarship for M.Tech. Students

- Scholarship of @20% on tuition fee (Rs.1,86,700 for 2 years, total course fee is Rs.2,29,600 for 2024 -25) i.e Rs.10,725/ per semester is applicable only to the students who have completed their B.Tech. Course (General or Lateral Entry) from any of the following institutions:
JISCE
NIT
GNIT
AEC
GKCEM
- Students having qualified scores in GATE are eligible for availing **PG Scholarship** provides by the AICTE.

Alumni Scholarship for B.Tech. Lateral Entry Students

- For Internal Student** - Scholarship of Rs.60,000/- @ Rs.10,000/- per semester on Tuition fee (Rs.2,32,750/-, total course fee is 2,92,750 for 2024-25) is applicable only to the students who have completed their three year Diploma course from any of the following institutions:
JISSP
JISCE NIT
GNIT AEC
GKCEM (JV)
- For Internal and External Student** - Scholarship of 32% Fees waiver per semester on Tuition fee i.e. Rs.2,00,000/-, total course fee is 2,92,750, for 2024-25) is applicable for the internal and external students taking admission in **B.Tech. Lateral Entry course in core streams.**

Scholarship for Tripura State Residentials B.Tech. Lateral Entry Student

Students of Tripura state residentials are eligible for availing Scholarship of 20% on Tuition Fee total of Rs 40750/- (i.e. Rs. 252000, total course fee Rs. 292750/- for 2024-25)

Scholarship

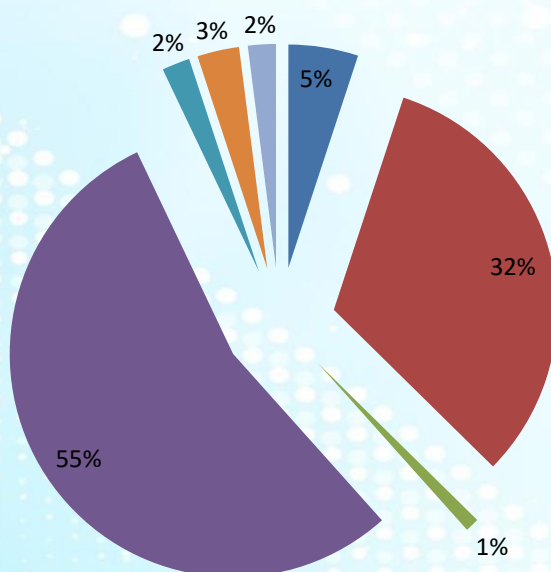
Other Scholarship Schemes

- Students belonging to **Sikh Minority** are eligible for availing special scholarship.
- Students are eligible to get **Half/Full freeship** (on Tuition Fee) having valid financial issues.
- **Sibling Scholarship** of 20% on the tuition fee is applicable to the immediate sibling of existing and former students.
- Children/immediate sibling of the permanent Employees working in any of the unit of JIS Group and worked minimum of 3 years of continuous are entitled to get **Employee Scholarship** and the scholarship percentage shall be determined upon the tenure of service in such case.
- **Girls students**, those who secured higher marks are eligible to get **Merit Scholarship**
- Students having higher marks, admitted in **Core branches** like ECE, EE, CE, ME, AUE, are entitled to get scholarship.
- Students from any stream, secured higher marks are eligible to get **Merit-cum-Means Scholarship**
- Students having TFW Rank in WBJEE and get allotted through Counselling are entitled to get **Tuition Fee Waiver** i.e. entire Tuition fees are waived off from the total requisite fees

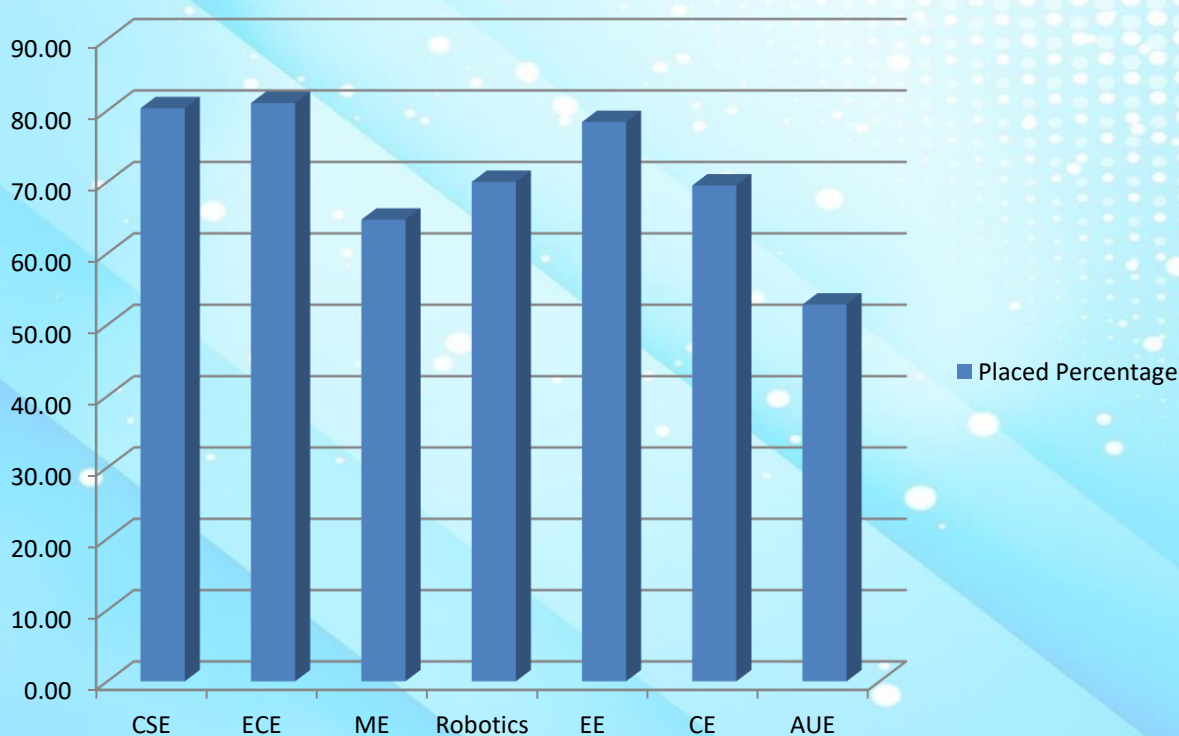
Training & Placement

Sectorewise Company Percentage

■ Automobile Industry ■ Core ■ Education ■ Software/IT/ITES
 ■ Others ■ Sales & Mktg. ■ Telecommunication

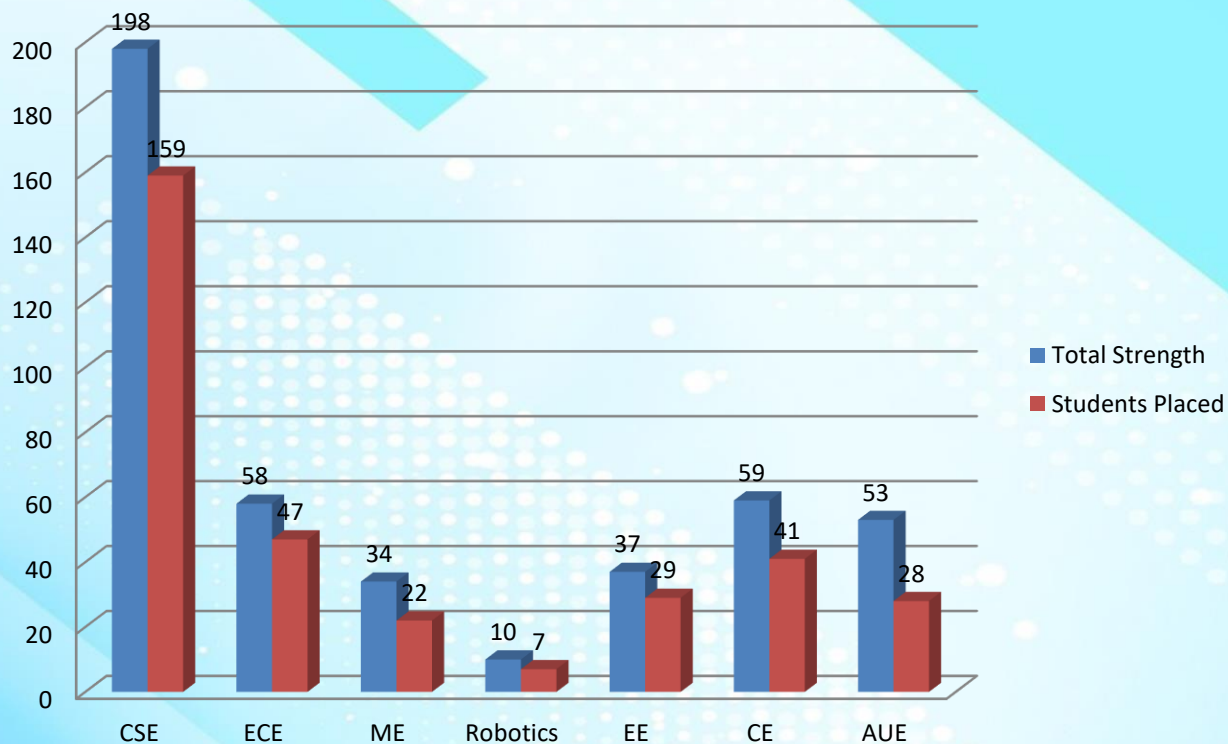


Placed Percentage 2025

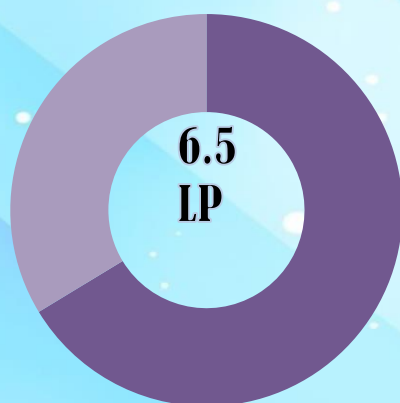


Training & Placement

Placement Streamwise 2025



Highest Package(2024-2025)



Number of Recruiters



Training & Placement

Details of Recruiter visited during AY 2024-25

Name of the Recruiters		
Sl.no	Company Name	Sector
1	Telaverge Communications India	IT
2	RTCAMP SOLUTIONS	IT
3	Pennar Industries	Core
4	SCHNEIDER ELECTRIC	Core
5	JUSPAY TECHNOLOGIES PVT. LTD.	IT
6	EAGLE BURGMANN INDIA PVT. LTD	Core
7	DELTAX TECHNOLOGIES PVT. LTD.	IT
8	SAP Labs India	IT
9	IBM	IT
10	Debson Pump	Core
11	Asahi India Glass	Core
12	Bently System	IT
13	Manikaran Power Ltd	Core
14	Videonetics Technology	IT
15	Kinlong India Hardware Pvt Ltd	Core
16	Artech Infosystem	IT
17	Bitwise	IT
18	ApMoSys Technologies	IT
19	Sasken	IT
20	Aditya Birla's Novel Jewels	Core
21	Roima Intelligence India	IT
22	Greenwave Solution	IT
23	Sabyasachi Calcutta LLP	Other
24	Embee Software	IT
25	Keyence India	Core

Training & Placement

Details of Recruiter visited during AY 2024-25

Name of the Recruiters		
26	AO Simth India Water Products Pvt. Ltd.	Core
27	A1 Fence Products Company	Core
28	Panasonic Life Solution	IT
29	Vasp Infotech	Core
30	RDC Concrete	IT
31	IBM	Core
32	Linde Global Support Services Pvt Ltd	Core
33	R R Kabel Infotech	Core
34	Goldstone Cements Ltd.	IT
35	IBM Consulting	Core
36	Nuvoco Vistas Corporation Limited	IT
37	Greenwave Solution	IT
38	LTI Mindtree	Core
39	Pinnacle Infotech	Core
40	Jai Balaji Group	IT
41	HCL Tech	Core
42	Motherson	Core
43	Suroj Buildcon Pvt. Ltd.	Core
44	PMT Mechine	Core
45	RVR Project	IT
46	QualityKiosk Technologies	IT
47	Archetive Solutions	Core
48	Spack Automotive	IT
49	TechMonastic Solution Pvt Ltd	Core
50	IMEG	IT
51	Pushpa Jewellers Limited	Core
52	C K Birla Group IIMS	Core
53	Prism Johnson Ltd.	Core
54	Control Print Limited	IT
55	TeksMobile	Core

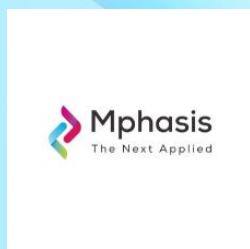
Training & Placement

Details of Recruiter visited during AY 2024-25

Name of the Recruiters		
56	Nicco Engineering	Core
57	Websol Energy System	IT
58	Arc Document	IT
59	Internsvelly	Core
60	Treveni Turbine Ltd	Core
61	KEC International	Core
62	Asaco Pvt Ltd	IT
63	TCS	Core
64	Transrail Lightning Ltd	Core
65	Goldman Sachs	IT
66	Nexucon	Core
67	Chelson Gordon Consultancy	Automobile
68	Go Mechanic	IT
69	Capgemini	Core
70	SgurrEnergy India	IT
71	Ericsson	Core
72	Victora Industries Pvt Ltd	IT
73	Trisys IT Services Private Limited	Automobile
74	Rane NSK	Core
75	Marut Air Systems	IT
76	Wekart Incorporation	Core
77	Deb Bureau of Engineer	IT
78	TCS	IT
79	Bitpastel Solution	IT
80	Karmick Solutions	Core
81	Polyhose India	Core
82	D&H Sécheron Electrodes	Core
83	Liugong India	IT
84	CTS	IT
85	Keeves Technology	IT

Training & Placement

Details of Recruiter visited during AY 2024-25



DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPORTS COMPLEX

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Website:

www.surtech.edu.in, Email: info@dsec.ac.in

**Affiliated to Maulana Abul Kalam Azad University of Technology West Bengal,
WBSCTVESD and Approved by AICTE**

Library Resources 2024-25

Library Resources

Library Services

The Library is an information resource center providing books, magazines, periodicals, and newspapers. Computers offer Internet access to online databases of full text periodicals and electronic books. The Library offers study rooms, course reserve materials, and photocopy machines.

The Library has more than **48,551** books (according to Accession Register), **04** Newspaper and **14** Journals and Magazines are purchased by the Library on regular basis. Besides these, **07** carrier oriented journals and **01** carrier oriented newspapers are purchased regularly for students so that they make prepare themselves for different competitive examinations. The Library, besides having a huge collection of books on engineering, science and humanities offers library services through its various Divisions.

Capable of accommodating 150 students, the DSCSITSC Library have CD-ROMS, E-journal, E-Books, magazines, Newspaper, B.O.G. reports, subject dictionaries, career guide books, ready references and previous years' question papers (Online + offline). The library provides a free and congenial atmosphere for sharing awareness, wisdom and information.

The whole Library is under the surveillance of CCTV.

Area: Total Carpet area 7500 sq.ft.

Library Opening Hours

Other than the holidays and Sundays, library remains opens on Monday to Friday: 8:00 a.m. to 8:00 p.m.

Saturday: 8:00 a.m.to 4:00 p.m.

Library Resources (Printed Document)

Text Books: 35,972

Reference Books: 12,579

Literature Books:111

Hard copy Journal & Magazine: 07 (Magazine) & 07 (Journals), Newspaper: 5 (4 Daily and 1 weekly)

Previous year question papers are also available in printed form.

E-Resources

E-books: 350

E-Journal: 206+

Database : J-Gate is a bibliographic database that indexes more than 67,846 journals and 71 million articles from over 16,000 publishers.

CD/DVD: 100+

On-Line Text based Information for IEEE ASPP Online- Tier 3

206 no's of online E-journal are fully Downloadable

Library Resources

National Digital Library of India (Govt. of India)

Repository hosts contents for multiple subject domains like Technology, Science, Humanities, Agriculture and Others Repository integrates contents from different Indian Institutional repositories. NDLI is designed to hold content of any language and provide interface support for 10 most widely used Indian languages. The books are available in Indian languages. As the books are being scanned, it has provided an opportunity for developing the Optical Character Recognition (OCR) software of Indian languages. The objective is to collect and collate the metadata and provide a full-text index from various digital libraries, both domestic and international, as well as from other relevant sources. It is a digital repository containing articles, textbooks, audio books, videos, lectures, fiction, simulations and all other kinds of learning media.

Wiley E-Books

Library has Wiley e-book subscription. Wiley E-Book is an IP-based service. Total No. of E-Books Title - 350+.

E-Books with FTP Server

Remote Access of the available E-books and other E-Study Materials in our library has been made through a FTP Server.

CD-DVD Corner

The audio, video and other digital documents are preserved in the DSCSITSC central Library, mainly in CDs and DVDs. These are accessioned as NB (Non Book). More than 100 CDs, DVDs are available in our collection on different subjects under the domain of Engineering.

DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPORTS COMPLEX

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Website:

www.surtech.edu.in, Email: info@dsec.ac.in

Affiliated to Maulana Abul Kalam Azad University of Technology West Bengal,
WBSCTVESD and Approved by AICTE

Memorandum of Understanding (MoU) 2024-25

INDIAN PHOTOBIOLOGY SOCIETY



MEMORANDUM OF UNDERSTANDING (MOU)

For
***Facilitating, Exchanging R&D Activities
among the faculty members, resource person
sharing to organize Faculty & Staff
Development programs.***

Between

INDIAN PHOTOBIOLOGY SOCIETY.

&

**Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex**

15TH JULY 2024

Principal
Dr. Sudhir Chandra Sur Institute
of Technology & Sports Complex
540, Dum Dum Rd. Kolkata-74
President
Indian Photobiology Society
Department of Chemistry
Jadavpur University, Kolkata-700032
Secretary
Chittaraj Sinha
Indian Photobiology Society
Department of Chemistry
Jadavpur University, Kolkata-700032

**Memorandum of Understanding (MoU) with
Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex
and INDIAN PHOTOBIOLOGY SOCIETY
on 15TH JULY 2024**

CYBERMOTION TECHNOLOGIES PVT. LTD.



MEMORANDUM OF UNDERSTANDING (MOU)

For

Facilitating, Exchanging R&D Activities and encouraging, guiding & funding students to proceed with research, project & entrepreneurship and taking up various funded research projects and exploiting Training, Internship & placement opportunities using industrial expertise.

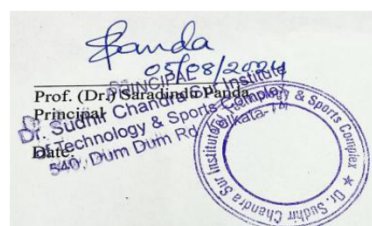
Between

CYBERMOTION TECHNOLOGIES PVT. LTD.

&

**Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex**

5TH AUGUST 2024



**Memorandum of Understanding (MoU) with
Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex
and CYBERMOTION TECHNOLOGIES PVT. LTD.
on 5TH AUGUST 2024**

AIRPORT AUTHORITY OF INDIA



MEMORANDUM OF UNDERSTANDING (MOU)

For

Creating interest in Civil Aviation among the students by Supplementing the theoretical knowledge with practical operations / working, giving opportunity to work on small-duration projects related to Civil Aviation, supporting project implementation, training, Workshops & Internship.

Between

AIRPORT AUTHORITY OF INDIA.

&

**Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex**

21ST AUGUST 2024

For Airports Authority of India:

For _____ University/College/ Institute:


(First Party Signature)


(Second Party Signature)

Date:

गिरीश कुमार / GIRISH KUMAR
सहप्रबन्धक (प्र.सं.) / General Manager (HR)
भारतीय विमानपत्तन प्राधिकरण / Airports Authority of India
नि.पु., राजीव गांधी भवन / CHQ, Rajiv Gandhi Bhawan
सफ़ेदरजंग हवाई अड्डा / Safdarjung Airport
नई दिल्ली-110003 / New Delhi-110003

Date: 21/08/2024

Dr. Sudhir Chandra Sur Institute
of Technology & Sports Complex
540, Dum Dum Rd. Kolkata-74

**Memorandum of Understanding (MoU) with Dr. Sudhir
Chandra Sur Institute of Technology and Sports Complex
and AIRPORT AUTHORITY OF INDIA
on 21ST AUGUST 2024**

Livid Design Inc.



MEMORANDUM OF UNDERSTANDING (MOU)

For
*Facilitating, Exchanging R&D Activities and
encouraging, guiding & funding students to
proceed with research, project &
entrepreneurship and taking up various
funded research projects and exploiting
Training, Internship & placement
opportunities using industrial expertise.*

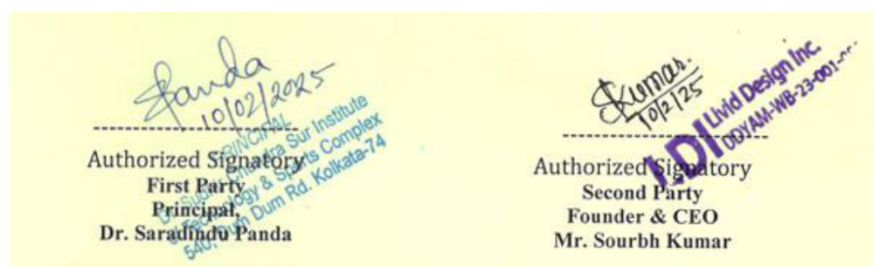
Between

LIVID DESIGN INC.

&

**Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex**

10TH FEBRUARY 2025



**Memorandum of Understanding (MoU) between
Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex and Livid Design Inc.
on 10TH FEBRUARY 2025**

SILESIAIAN UNIVERSITY OF TECHNOLOGY, POLAND



Silesian University
of Technology

MEMORANDUM OF UNDERSTANDING (MOU)

For

*Establishing cooperation in all academic
areas of mutual interest, e.g., joint activities
for the education of students and doctoral
students, research, academic exchange of
students and staff, etc.*

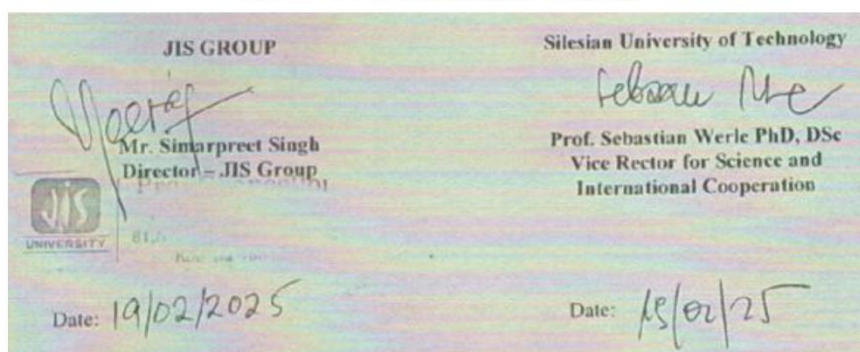
Between

**SILESIAIAN UNIVERSITY OF TECHNOLOGY,
POLAND.**

&

**Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex**

19TH FEBRUARY 2025



**Memorandum of Understanding (MoU) between
Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex and
SILESIAIAN UNIVERSITY OF TECHNOLOGY,
POLAND
on 19TH FEBRUARY 2025**

IAE ACADEMY



MEMORANDUM OF UNDERSTANDING (MOU)

For

*Encouraging & guiding students to proceed
with research, project & entrepreneurship and
exploiting Training, Internship & placement
opportunities using industrial expertise.*

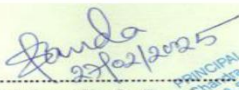
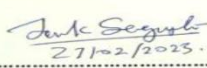
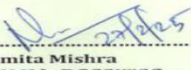
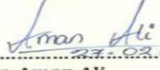

Between

IAE ACADEMY.

&

**Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex**

27TH FEBRUARY 2025

 Prof. (Dr.) Saradindu Panda Principal, Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex	 Mr. Junik Sengupta Training Coordinator (Tech) INSTITUTE OF ACADEMIC EXCELLENCE
Witness: - 1	Witness: -
 Ms. Madhusmita Mishra TIC, CSE (AIML), DSCSITSC	 Mr. Aman Ali Marketing Executive INSTITUTE OF ACADEMIC EXCELLENCE
Witness: - 2	
 Dr. Amrut Ranjan Jena HOD, CSE, DSCSITSC	

**Memorandum of Understanding (MoU) between
Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex and
IAE ACADEMY
on 27TH FEBRUARY 2025**

CENTRE OF EXCELLENCE – AI & DIGITAL TRANSFORMATION



MEMORANDUM OF UNDERSTANDING (MOU)

For

Facilitating, Exchanging R&D Activities and encouraging, guiding & funding students to proceed with project & entrepreneurship and exploiting Training, Internship & placement opportunities using industrial expertise.

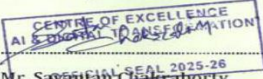
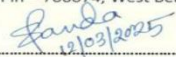

Between

**CENTRE OF EXCELLENCE – AI & DIGITAL
TRANSFORMATION**

&

**Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex**

12TH MARCH 2025

<p>Centre of Excellence – AI & Digital Transformation (Implementation Agency: Indian Institute of Internship) Address: RDB 5th Floor and Globsyn Crystal Building, Salt Lake City, Kolkata-700091</p> <p> Mr. Sayantan Chakraborty Technical Director, Centre of Excellence – AI & Digital Transformation (Implementation Agency: Indian Institute of Internship) State: West Bengal City: Kolkata</p>	<p>Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex Address: 540, Dum Dum Road, Surermath, Kolkata, Pin – 700074, West Bengal, India</p> <p> Prof. (Dr.) Saradindu Panda Principal, Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex</p> <p></p>
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**Memorandum of Understanding (MoU) between
Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex and
CENTRE OF EXCELLENCE – AI & DIGITAL
TRANSFORMATION
on 12TH MARCH 2025**

M/S. IMAGIMINDS CADD & ENGINEERING SOLUTIONS, A CADPOINT AUTHORIZED TRAINING INSTITUTE



MEMORANDUM OF UNDERSTANDING (MOU)

For

Facilitating, Exchanging R&D Activities and encouraging, guiding & funding students to proceed with research, project & entrepreneurship and taking up various funded research projects and exploiting Training, Internship & placement opportunities using industrial expertise.


Between

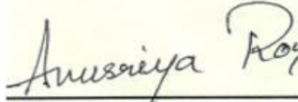
M/S. IMAGIMINDS CADD & ENGINEERING SOLUTIONS, A CADPOINT AUTHORIZED TRAINING INSTITUTE

&

Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex

19TH MARCH 2025


19/03/2025
Principal, Dr. Sudhir Chandra Sur Institute of Technology & Sports Complex (An Autonomous body), Dum Dum


Mrs. Anusriya Roy
Partner & Operations Manager
Imagiminds Cadd & Engineering Solutions

**Memorandum of Understanding (MoU) between
Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex and
M/S. IMAGIMINDS CADD & ENGINEERING
SOLUTIONS, A CADPOINT AUTHORIZED
TRAINING INSTITUTE
on 19TH MARCH 2025**

DYNAMIC ENGINEERING



MEMORANDUM OF UNDERSTANDING (MOU)

For

Facilitating, Exchanging R&D Activities and encouraging, guiding & funding students to proceed with research, project & entrepreneurship and taking up various funded research projects and exploiting Training, Internship & placement opportunities using industrial expertise.


Between

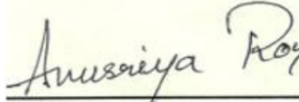
**M/S. IMAGIMINDS CADD & ENGINEERING
SOLUTIONS, A CADPOINT AUTHORIZED
TRAINING INSTITUTE**

&

**Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex**

19TH MARCH 2025


19/03/2025
Principal, Dr. Sudhir Chandra Sur Institute
of Technology & Sports Complex
(An Autonomous body), Dum Dum


Mrs. Anusriya Roy
Partner & Operations Manager
Imagiminds Cadd & Engineering Solutions

**Memorandum of Understanding (MoU) between
Dr. Sudhir Chandra Sur Institute of Technology
and Sports Complex and
DYNAMIC ENGINEERING
on 19TH MAY 2025**

DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPORTS COMPLEX

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Website:

www.surtech.edu.in, Email: info@dsec.ac.in

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IT Resources 2024-25

IT Resources

Hardware

SERVER - 5

DESKTOP - 626

LAPTOP- 7

LCD Projector -24

Switches - 28

Firewall And Routers - 2 (FortiGate FG 300E & Cyberoam CR100ia Firewall), 1 (Extreme Network Switch),

Printers - 41

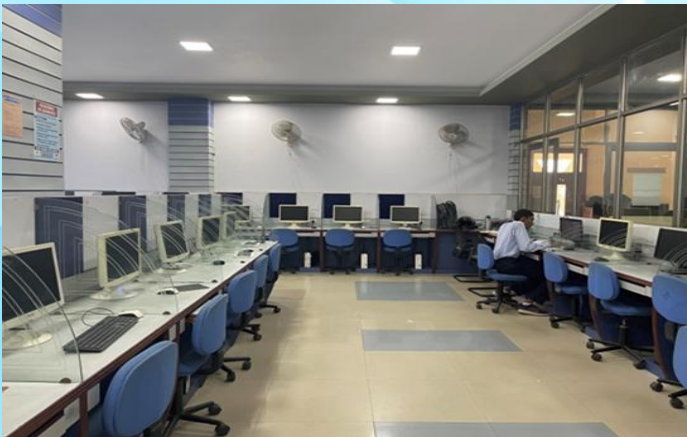
Scanners - 07

Photocopiers -1

Video Conferencing Systems- 1

Wifi Devices = 36 Bio Metric Device = 2

CCTV Cameras - 130



IT Resources

Services

WiFi Bandwidth –

500 Mbps **Alliance** Broadband Lease Line Connection.

200 Mbps **Railtel** Broadband Lease Line Connection **backup line**,

1 Gbps CAT6 Intranet – connected **Central Computing Facilities:** yes

MHRD's QEEE Infrastructure :

Microsoft Exchange mail server: managed by Hash Technologies

WiFi Facility throughout the campus: yes

Website hosting all Website Details: managed by Hash Technologies

Software

Licensed Software :-

Microsoft Windows (7/8/10/11),

Microsoft windows Server
(2008/2012/2016/2019)

Applica- tion Software	Department	Software
	ECE	MATLAB SOFTWARE, PERPETUAL ACADEMIC CONCURRENT NETWORK LICENSE FOR WINDOW/LINUX/MAC PLATFORMS, LATEST VERSION (2010), 5USER SOFTWARE INCLUDES-MATLAB, CONTROL SYSTEM TOOLBOX ,SINGNALPROCESSING TOOL BOX, DSP SYSTEMS TOOL BOX, COMMUNICATION SYSTEMS TOOL BOX Mentor Software- HDL Author Ultra PE VHDL Bundle S/W (consist of HDL Author Ap SW & Modelsim PE VHDL Ap SW), License- Perpetual, Version- Latest, 1 set of 5 user. P-SIM Latest Version Consists of P-SIM BASIC, DIGITAL CONTROL MODULE, MOTOR DRIVES MODULE, 5 USER NETWORK LICENSE, TERM PERPETUAL.
	CE	Civil- software - 20 user STAAD, Pro V8i & STTAD Foundation Advance MX Road etc with India Code of desin software Academic Perpetual

IT Resources

Applica- tion Soft- ware	Department	Software
	Library	Software(LIBMAN 5.3).
	AUE	Autocad 2005-win Student edu – single user License. CATIA V5 (ED2) Academic Latest Edition Licenses Including one (01) year ALC – 05 User Bundle(Perpetual License)
	CSE	Microsoft Campus Agreement. SQL SrvStd 2012 SNGL OLP NL Acdmc SQL Server 2019 Standard Edition Educational. Edraw max 5 user Oracle 19c Std Edition 2 for Windows (10 user)
	EE	Software-Embedded Lab with sensor Web & Internet of Things (i) IOT Trainer Kit = 2nos (ii) All in one General Purpose Board =2 nos (iii) IOT Gateway = 1 no (iv) Bluetooth Module = 1 no (v) Router = 1 no (vi) Portable sensor kit = 1 no (vii) a set of Sensors- (Temperature, Humidity, Reed switch, Touch Key, Vibration, Moisture, Dust, Water, Soil, Moisture, Accelerometer, Gyro Meter, Magneto, Pressure, PIR Motion Sensor)= 1 set (viii)Base Board for Interfacing Sensors= 2 nos (Uses for EE Dept.) P-SIM Latest Version Consists of P-SIM BASIC, DIGITAL CONTROL MODULE, MOTOR DRIVES MODULE, 5 USER NETWORK LICENSE, TERM PERPETUAL. POWER WORLD SIMULATOR BASIC BUNDLE LATEST VERSION, 25 LICENSE PERPETUAL, NODE LOCKED SOFTWARE KEY BASED.
	ME	Pro/Engineer Software inclusive of all modules under University plus Lab Bundle Software for 50 User perpetual site license
	BSH	Upgrade of Orell Talk 2.0Smart Version (License Free for Life time Perpetual License for 1 Teacher and 40 Student Consoles at Language Lab 2)



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Department of Basic Science & Humanities

ANNUAL REPORT 2024-25

Department of Basic Science & Humanities

Vision of the department

To provide guidance to all aspiring technocrats through well-developed & innovative teaching learning methodology and to foster students towards R & D, entrepreneurship activities for their future prospectus with strong foundations in Mathematics, Chemistry, Physics and Communications skills.

Mission of the department

DM1: To emphasize the importance of Basic Science and develop a natural flair for Engineering & Technology

DM2: To promote academic excellence in fundamental Science & Humanities

DM3: To produce competent future technocrats through innovative teaching-learning methodologies

DM4: To create an environment where students' Idea, Creativities and R & D activities are encouraged.

Department of Basic Science & Humanities

Program Outcomes

- * **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- * **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- * **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- * **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- * **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- * **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- * **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Department of Basic Science & Humanities

- * **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- * **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- * **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- * **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- * **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Department of Basic Science & Humanities

Brief Overview of the Department

The Department of Basic Sciences & Humanities has been a part of DSCSITSC right from the inception of the college in 2009.

It consists of the core branches of basic science- Physics, Chemistry, Mathematics, Biology along with subjects of Humanities domain.

These subjects lay the essential foundation for the various branches of engineering. The focus is to create an understanding of the basic principles of science and harness the knowledge of the students for designing, building and maintaining a product or process that solves a problem and fulfils a need (technology).

The Department has well-equipped laboratories of Physics, Chemistry and Language to promote overall development of the students by enhancing their practical skills along with incorporation of sound theoretical knowledge.

It also encourages students to take up challenging projects and internships at the National and International level in order to fine-tune their technical skills.

The department garners the importance of an up-to-date English Communication to increase proficiency in English Language to cope up with the cut throat competition in the job market.

We equip students to imbibe best humane and professional values.

The Basic Sciences and Humanities department have always taken the initiative as first year teachers in all the B. Tech streams to develop the moral characters of the concerned students.

The department of BSH has rich curriculum and allied activities to provide a comprehensive education for B.Tech graduates. It prepares them to be technically well off, to be critical thinkers, productive citizens, and leaders in a wide range of careers; government as well as an array of managerial options in the private sector.

Department of Basic Science & Humanities

HOD Message

Dear colleagues and students,

Welcome you all to Basic Science & Humanities Department of Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex.

The Basic Science & Humanities Department is the back bone of the entire engineering education system. It comprises Mathematics, Physics, Chemistry, Biology, English and Humanities. The faculty members have undertaken the methodology of classroom teaching based on application of innovative strategies, comprehensive lectures, regular assignments and active interaction between teachers and students. Hence, **the department plays a key role in assessing, evaluating and improving the multi-dimensional skills of the students to build them as the upcoming pillars of foundation of the nation.**

Our departmental laboratories supported by modern equipment to help the students to attain practical knowledge, accurate application and perfection over the presentation skills.

The department is supported by highly qualified faculty with good teaching experience, who put consistent effort to meet the expectations of the students. They are easily accessible and approachable so that students feel free to come for counseling, guidance or for clarifications. **They also play a vital role in imparting placement training in quantitative aptitude, verbal ability and soft skills to pre – final year students.**

A quotation for all my students

“An investment in knowledge pays the best interest” - Benjamin Franklin

Wishing you all a successful and rewarding academic year!

Dr. Dipankar Das

HOD, Department of Basic Science & Humanities

Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex

Department of Basic Science & Humanities

Departmental Achievement:

1. R&D Details of the Department:

Academic year	Publication details				Total no. of publication	No. of paper presented in conference/seminar/workshop etc	No. of Book published	No. of Book Chapter published	No. of Patents granted	No. of Patents published	No. of Patents filed	No. of Projects applied	Projects Granted details	
	SCI	Scopus	WoS	UGC/other									No.	Rs.
2024-25	19	0	0	1	19	6	2	14	0	11	0	7	3	63 Lakh (ANRF) 30 lakh (IDEA Lab) and 1lakh (AICTE ATAL FDP)
2023-24	3	0	0	0	4	2	2	4	1	1	0	2	0	0

Departmental Achievement

1. Seminar/ Workshop/ Conference Organized :

FDP/Seminar/ Workshop/ Conference Organized at the Institute- Commencement of the semester to till date						
Serial No.	Name of Visitor / Guest Speaker	Designation/ Occupation	Seminar/ Workshop/ Conference Topic	Total Participant	Date	Organized By (Dept. Name/Institute level)
1.	Prof. Sabyasachi Bhattacharya,	Professor, ISI, Kolkata	Workshop	29	19/08/2024-23/08/2024	Basic Science and Humanities
2.	Prof. Joe Otsuki (College of Science and Technology, Nihon University, Japan)	Professor, Nihon University, Japan	Conference	125	30/01/2025-31/01/2025	Basic Science and Humanities
3.	Miki Hasegawa	Professor, Aoyama Gakuin University, Japan	ATAL FDP	220	10/02/2025-15/02/2025	Basic Science and Humanities

FDP/Seminar/ Workshop/ Conference Attended by BSH Faculty							
Sl No.	Name of Participant	Title of FDP	Name of Organizer	Date	Participation	National/ International	Name of Speaker
1.	Dr Dipankar Das	Explainable AI in Healthcare	JIS College of Engineering	01/07/2024-05/07/2024	Participated	National	Dr. Nibaran Das, Professor, Dept of CSE, Jadavpur University
2.		Innovation in Emerging Field	Dept. of CSE,EE, IQAC and IIC cell, GKCEM	15/07/2024-19/07/2024	Participated	National	Resource Person from Jadavpur University
3.		Mastering Machine Learning with R: Advanced Applications and Techniques for Career Development”	Basic Science & Humanities Department	19/08/2024-23/08/2024	Participated	National	Prof. Sabyasachi Bhattacharya , Professor, ISI, Kolkata

Department of Basic Science & Humanities

Departmental Achievement:

FDP/Seminar/ Workshop/Conference Attended by BSH Faculty

Sl No.	Name of Participant	Title of FDP	Name of Organizer	Date	Participation	National/ International	Name of Speaker
4.	Dr Dipankar Das	Emerging Trends in Research and its Application in Engineering' ETRAEE-2025	Department of Electronics & Communication Engineering, MCKV Institute of Engineering	26/05/2025-30/05/2025	Participated	National	Prof.(Dr.) Sayan Chatterjee,ETCE Department, Jadavpur University
5.		Advances in Materials Science for Sustainable Development and Industrial Applications	Department of Basic Science & Humanities, SurTech	10/02/2025 - 15/02/2025	Co-ordinator	National	Prof. Chittaranjan Sinha , Jadavpur University
6.		Recent Developments and Applications in Materials Science and Engineering	Department of Basic Science & Humanities, SurTech	30/01/2025-31/01/2025	Convenor	International	Prof.(Dr) Kalyan Kumar Chattopadhyay, Professor, Jadavpur University
7.		Advancing Energy Transition: Strategies for Sustainability and Climate Resilience	IS School of Polytechnic, Kalyani	25/11/2024-30/11/2024	Participated	National	Prof.(Dr) Swapan Kumar Parui , Professor, Dept of ECE, IEST, Howrah
8.		Building Skills for Advanced Cognitive Assessment	Dr. Sudhir Chandra Sur Institute of Technology and sports Complex	03/03/2025-07/03/2025	Participated	National	Dr Vinay Kulkarni, Ms Mrunalini Buradkar

Department of Basic Science & Humanities

Departmental Achievement:

FDP/Seminar/ Workshop/Conference Attended by BSH Faculty

Sl No.	Name of Participant	Title of FDP	Name of Organizer	Date	Participation	National/ International	Name of Speaker
9.	Dr. Bapin Mondal	Mastering Machine Learning with R: Advanced Applications and Techniques for Career Development”	Basic Science & Humanities Department	19/08/2024-23/08/2024	Participated	National	Prof. Sabyasachi Bhattacharya, Professor, ISI, Kolkata
10.		“Exploring Emerging Frontiers in Generative AI and Quantum Computing“	Department of CSE (IoT, CS, BT), IEM Kolkata in association with HRDC, IEM-UEM Group	23/09/2024-27/09/2024	Participated	National	Dr. Goutam Paul, Associate Professor and Head of the Cryptology and Security Research Unit at ISI Kolkata
11.		Transforming Innovations into Reality for Future science and Engineering (TIRFSE 2K24)	Department of Applied Sciences & Humanities, Haldia Institute of Technology, Haldia, IN in association with Indian JSPS (Japan Society for the Promotion of Science) Alumni Association (IJAA) & Department of Physics, Mohanlal Sukhadia University, Udaipur, IN	04/11/2024-08/11/2024	Participated	International	Prof. Yoshiro Azuma, Former Professor of Department of Physics, Sophia University, Tokyo, Japan

Department of Basic Science & Humanities

Departmental Achievement:

FDP/Seminar/ Workshop/Conference Attended by BSH Faculty							
Sl No.	Name of Participant	Title of FDP	Name of Organizer	Date	Participation	National/ International	Name of Speaker
12.	Ms. Nibedita Biswas	Explainable AI in Healthcare	JIS College of Engineering	01/07/2024-05/07/2024	Participated	National	Dr Nabendu Ghosh, Peofessor, Dept of ME, Jadavpur University
13.		Mastering Machine Learning with R: Advanced Applications and Techniques for Career Development”	Basic Science & Humanities Department	19/08/2024-23/08/2024	Participated	National	Prof. Sabyasachi Bhattacharya, Professor, ISI, Kolkata
14.		Research Methodology and Research Paper Writing in Management and Social Sciences	Guru Nanak Institute of Hotel Management	04/11/2024-08/11/2024	Participated	National	Prof. S.C Bagri, Dr. Rasheedul Haque, Dr. Ritesh R. Bhat, Prof(Dr.) Ashish Dahiya, Dr. Dilip Kr. Das
15.		Recent Developments and Applications in Materials Science and Engineering	Department of Basic Science & Humanities, SurTech	30/01/2025-31/01/2025	Participated	International	Kalyan Kumar Chattopadhyay, Professor, Jadavpur University
16.		Advances in Material Science for Sustainable Development and Industrial Applications	ALL INDIA COUNCIL FOR TECHNICAL EDUCATION	10/02/2025-15/02/2025	Participated	National	oe Otsuki (Professor, Nihon University, Japan), Miki Hasegawa(Professor, Aoyama Gakuin University, Japan)

Department of Basic Science & Humanities

Departmental Achievement:

FDP/Seminar/ Workshop/Conference Attended by BSH Faculty							
Sl No.	Name of Participant	Title of FDP	Name of Organizer	Date	Participation	National/ International	Name of Speaker
17.	Ms. Nibedita Biswas	Building Skills for Advanced Cognitive Assessment	Dr. Sudhir Chandra Sur Institute of Technology and sports Complex	03/03/2025-07/03/2025	Participated	National	Dr Vinay Kulkarni, Ms Mrunalini Buradkar
18.		Bridging Research & Funding: Unlocking Grants for Industry & Academia	Dr. Sudhir Chandra Sur Institute of Technology and sports Complex	07/04/2025-11/04/2025	Participated	National	Prof.(Dr.) Manojit Ghosh, Metallurgical Department, IEST, Shibpur
19.	Ms. Debasmita Roy Chowdhury	Mastering Machine Learning with R: Advanced Applications and Techniques for Career Development”	Basic Science & Humanities Department	19/08/2024-23/08/2024	Participated	National	Prof. Sabyasachi Bhattacharya , Professor, ISI, Kolkata
20.		Recent Developments and Applications in Materials Science and Engineering	Department of Basic Science & Humanities, SurTech	30/01/2025-31/01/2025	Participated	International	Kalyan Kumar Chattopadhyay, Professor, Jadavpur University
21.		Building Skills for Advanced Cognitive Assessment	Dr. Sudhir Chandra Sur Institute of Technology and sports Complex	03/03/2025-07/03/2025	Participated	National	Dr Vinay Kulkarni, Ms Mrunalini Buradkar
22.	Dr. Sukhendu Sadhukhan	Mastering Machine Learning with R: Advanced Applications and Techniques for Career Development”	Basic Science & Humanities Department	19/08/2024-23/08/2024	Participated	National	Prof. Sabyasachi Bhattacharya , Professor, ISI, Kolkata

Department of Basic Science & Humanities

Departmental Achievement:

FDP/Seminar/ Workshop/Conference Attended by BSH Faculty							
Sl No.	Name of Participant	Title of FDP	Name of Organizer	Date	Participation	National/ International	Name of Speaker
23.	Ms. Pallabi Bose	Mastering Machine Learning with R: Advanced Applications and Techniques for Career Development”	Basic Science & Humanities Department	19/08/2024-23/08/2024	Participated	National	Prof. Sabyasachi Bhattacharya, Professor, ISI, Kolkata
24.		“Exploring Emerging Frontiers in Generative AI and Quantum Computing“	Department of CSE (IoT, CS, BT), IEM Kolkata in association with HRDC, IEM-UEM Group	23/09/2024-27/09/2024	Participated	National	Dr. Goutam Paul, Associate Professor and Head of the Cryptology and Security Research Unit at ISI Kolkata
25.		Transforming Innovations into Reality for Future science and Engineering (TIRFSE 2K24)	Department of Applied Sciences & Humanities, Haldia Institute of Technology, Haldia, in association with Indian JSPS Alumni Association (IJAA) & Mohanlal Sukhadia University, Udaipur, IN	04/11/2024-08/11/2024	Participated	International	Prof. Yoshiro Azuma, Former Professor of Department of Physics, Sophia University, Tokyo, Japan
26.	Ms. Shayari Basu	Recent Developments and Applications in Materials Science and Engineering	Department of Basic Science & Humanities, SurTech	30/01/2025-31/01/2025	Participated	International	Kalyan Kumar Chattopadhyay, Professor, Jadavpur University
27.		Building Skills for Advanced Cognitive Assessment	Dr. Sudhir Chandra Sur Institute of Technology and sports Complex	03/03/2025-07/03/2025	Participated	National	Dr Vinay Kulkarni, Ms Mrunalini Buradkar

Department of Basic Science & Humanities

Departmental Achievement:

MOOCs completed by BSH Faculty

Sl No.	Date of Completion	Name of Participant	Name of the Topic	Name of University
1.	01/05/2025-31/05/2025	Ms. Nibedita Biswas	Getting Started with Microsoft Excel	Coursera Project Certificate
2.	01/06/2025-07/06/2025	Dr Dipankar Das	How To Visualize Your Data Using Microsoft Power point	Coursera Project Network (Product Development Professional)
3.	03/06/2025-08/06/2025	Dr Dipankar Das	Build a Full Website using WordPress	Coursera Project Network (Freedom Learning Group)
4.	31/05/2025-09/06/2025	Dr Dipankar Das	Introduction to Project Management with ClickUp	Coursera Project Network (Freedom Learning Group)
5.	18/04/2025-20/05/2025	Ms. Debasmita Roy Chowdhury	Business Analysis & Process Management	Coursera Project Certificate

Department of Basic Science & Humanities

Departmental Achievement:

MoU Organized by BSH Dept.				
Sl No.	Date of Completion	Name of Organization	No. of years	Outcomes
1.	29/07/2024	Indian Photobiology Society, (Affiliated to the Association International Photobiology) Jadavpur University Campus, Kolkata-700032	5 years	To jointly organize seminars, conferences, or workshops on topics of mutual interest and to invite each other's faculty to participate therein.

Department of Basic Science & Humanities

Departmental Achievement

Extracurricular Events/ Activities organized:

Sl. No.	Name of Dept.	Name of the Event/ Activity	Date of Visit	Outcome
1.	Basic Science and Humanities	Practical Session on Meditation to Students	30/08/2024	The session helped reduce stress and anxiety, promoting a sense of emotional balance and inner peace. Students also demonstrated increased self-awareness and a greater ability to regulate their emotions, which contributed to more respectful and thoughtful interactions with peers and teachers.
2.	Basic Science and Humanities	Students' Induction Programme	20/08/2024-10/09/2024	The Students' Induction Program had a positive and lasting impact on the overall development of the newly admitted students. through various interactive sessions, students gained clarity about their academic journey, available resources, and support systems such as mentorship, counseling, and extracurricular opportunities.
3.	Basic Science and Humanities	Observation of Constitution Day	26/11/2024	Through activities such as the reading of the Preamble, discussions, quizzes, and speeches, students developed a sense of respect and appreciation for the democratic framework of the country.
4.	Basic Science and Humanities	Observation of International Mother Language Day	21/02/2025	The celebration of International Mother Language Day had a profound impact on students by fostering an appreciation for linguistic diversity and cultural heritage.
5.	Basic Science and Humanities	International Women's Day	08/03/2025	The celebration of Women's Day had a meaningful impact on students by promoting gender equality, respect, and awareness of women's contributions to society.

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Department of Civil Engineering

ANNUAL REPORT 2024-25

Department of Civil Engineering

Vision of the department

To be recognized as an internationally acclaimed technical department by achieving excellent standards of quality technical education, keeping pace with the rapidly changing technologies, research and innovations and to produce Civil Engineers of global standards with the capability of accepting new challenges

Mission of the department

DM1: To impart fundamental knowledge of engineering and its practical application by developing state-of-the-art facilities for the department of Civil Engineering.

DM2: To nurture and build people in a rewarding and inspiring environment by fostering creativity, empowerment, innovation and entrepreneurship.

DM3: To build Industry – Institute linkage for quality improvement by promoting participation of industries in the area of consultancy

DM4: To encourage the students towards higher education through research and development activities

Department of Civil Engineering

Program Outcomes

- * **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- * **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- * **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- * **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- * **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- * **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- * **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Department of Civil Engineering

- * **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- * **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- * **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- * **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- * **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Department of Civil Engineering

Program Educational Objective (PEO)

PEO1: Graduates of Civil Engineering department shall become successful in their professional through strong foundation in core principles and ability of analyzing and solving complex engineering problem in real life

PEO2: Graduates will excel in the field of higher studies through lifelong learning.

PEO3: Graduates will excel in effective communication, teamwork, and leadership, enabling them to work collaboratively in multidisciplinary settings and take on leadership roles within their organizations

Department of Civil Engineering

Programme Specific Outcomes (PSOs)

PSO1: Graduates will have strong fundamental knowledge in core topics of each subject and will have the ability to describe, analyse, and solve problems using mathematics and systematic problem-solving technique for core subjects of Civil Engineering

PSO2: Graduates will be able to patronize higher studies and technological practice in Civil Engineering and to keep pace with the modern construction techniques and management tools either in industry or through entrepreneurship

PSO3: Graduates will possess strong professional skills, both written and oral, enabling them to convey technical information effectively to diverse audiences, including clients, colleagues, and the public

Department of Civil Engineering

Brief Overview of the Department

The Department of Civil Engineering of DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPORTS COMPLEX was commenced in the year of 2012. It offers both B.Tech and Diploma Engineering courses. The department has sound infrastructure supported by state of art laboratories. The department is also enriched with good academicians from IIT, NIT, IEST, JU and other reputed Institutions. The department is frequently conducting industrial visits, seminars, workshops, debate, quiz and other social activities.

Soft skill programs are embedded as a regular part of academics for better placements. Department is conducting parent's teachers meetings from time to time for constant monitoring of academics and attendance of the students. For maintaining better feedback, mentor mentee meetings are held in the department periodically.

Some laboratory experiments are conducted beyond syllabus by bringing experts/scientists from reputed houses. Initiation is being taken by each mentor of the department for completion of NPTEL online courses by the students. Annual sports and college tournaments both outdoor and indoor games are conducted supported by a fantastic indoor stadium at our campus. Active participation of students is held in academic, cultural and sports competition. The department is taking care of placing the students in industry for their summer and winter internship training as per need.

Department of Civil Engineering

HOD Message

Dear colleagues and students,

I am thrilled to address you as the Head of the Civil Department and share my enthusiasm for the incredible work and progress we have made together. As we embark on this new academic year, I want to extend my warmest greetings and express my deep appreciation for your dedication and commitment to excellence.

Our Civil Department has always been a driving force of innovation and knowledge in our institution, and this newsletter is a testament to the remarkable achievements and contributions of our faculty, staff, and students. Through this platform, we aim to showcase our department's accomplishments, share valuable insights, and foster a sense of community and collaboration.

Our department has a proud history of producing competent and skilled civil engineers who leave a lasting impact on society. As we move forward, let us continue to uphold the values of integrity, professionalism, and ethical responsibility that define our field.

In this newsletter, we will highlight the diverse range of research and academic pursuits undertaken by our faculty and students. From cutting-edge research projects to impactful community initiatives, each endeavor is a reflection of our commitment to making a difference in the world.

Department of Civil Engineering

As we face global challenges like climate change and urbanization, civil engineering plays a crucial role in building a sustainable and resilient future. Let us take this opportunity to discuss the role of civil engineering in promoting sustainability, environmental conservation, and inclusive development.

In addition to academic achievements, this newsletter will also feature stories that celebrate our department's vibrant culture and camaraderie. From workshops and seminars to extracurricular activities and student achievements, we aim to showcase the holistic growth of our department.

I encourage all of you to actively participate in this newsletter's creation. Your ideas, contributions, and feedback are invaluable in making it a true reflection of our department's spirit. Let us engage in open discussions, share our experiences, and inspire one another to reach new heights of excellence.

I extend my gratitude to our exceptional faculty and staff for their tireless efforts and dedication to nurturing the next generation of civil engineers. I am also immensely proud of our students, whose enthusiasm and passion continue to drive us forward.

Thank you all for your unwavering support and commitment to the Civil Department. Together, let us seize the opportunities that lie ahead, overcome challenges, and leave a lasting legacy that shapes the future of civil engineering.

Wishing you all a successful and rewarding academic year!

Dr. Arijit Acharjya

HOD, Department of Civil Engineering

Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex

Department of Civil Engineering

Departmental achievements

Year: 2024-2025 Name of the participant: Souradeep Roy, Designation: Assistant Professor Title of the book/Chapter/conference Published: Assessing the Viability of Biological Treatment Methods for Stabilizing Municipal Solid Waste in Urban India in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Sourav Kumar Singha, Designation: Assistant Professor Title of the book/Chapter/conference Published: Assessing the Viability of Biological Treatment Methods for Stabilizing Municipal Solid Waste in Urban India in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Arijit Acharyya, Designation: Assistant Professor Title of the book/Chapter/conference Published: Assessing the Viability of Biological Treatment Methods for Stabilizing Municipal Solid Waste in Urban India in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Krishnendu Kundu, Designation: Assistant Professor Title of the book/Chapter/conference Published: Traffic Management in Kolkata During Major Sporting Events and Its Impact on Traffic Jam and Environmental Quality: A Case Study, in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Baibaswata Das, Designation: Assistant Professor Title of the book/Chapter/conference Published: Traffic Management in Kolkata During Major Sporting Events and Its Impact on Traffic Jam and Environmental Quality: A Case Study, in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Souvik Chakraborty, Designation: Assistant Professor Title of the book/Chapter/conference Published: Traffic Management in Kolkata During Major Sporting Events and Its Impact on Traffic Jam and Environmental Quality: A Case Study, in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Souvik Chakraborty, Designation: Assistant Professor Title of the book/Chapter/conference Published: Traffic Management in Kolkata During Major Sporting Events and Its Impact on Traffic Jam and Environmental Quality: A Case Study, in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Souvik Chakraborty, Designation: Assistant Professor Title of the book/Chapter/conference Published: Coastal Water Purification Strategies for Agricultural , in the field of Civil Engineering.

Department of Civil Engineering

Departmental achievements

Year: 2024-2025 Name of the participant: Sourav Kumar Singha, Designation: Assistant Professor Title of the book/Chapter/conference Published: Coastal Water Purification Strategies for Agricultural in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Baibaswata Das, Designation: Assistant Professor Title of the book/Chapter/conference Published: Coastal Water Purification Strategies for Agricultural in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Krishnendu Kundu, Designation: Assistant Professor Title of the book/Chapter/conference Published: Coastal Water Purification Strategies for Agricultural in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Souradeep Roy, Designation: Assistant Professor Title of the book/Chapter/conference Published: Coastal Water Purification Strategies for Agricultural in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Baibaswata Das, Designation: Assistant Professor Title of the book/Chapter/conference Published: A Review on the Compatibility for Implementation of Rainwater Harvesting in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Souradeep Roy, Designation: Assistant Professor Title of the book/Chapter/conference Published: A Review on the Compatibility for Implementation of Rainwater Harvesting in the field of Civil Engineering

Year: 2024-2025 Name of the participant: Mr. Sourav Kumar Singha, Designation: Assistant Professor Title of the conference:, "Groundwater Recharge by Rainwater Harvesting – A Case Study," published in book INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS: 1st Edition, 30/05/2025, ISBN: 978-81- 983133-6-2.

Year: 2024-2025 Name of the participant: Mr. Baibaswata Das Designation: Assistant Professor Title of the conference:, "Groundwater Recharge by Rainwater Harvesting – A Case Study," published in book INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS: 1st Edition, 30/05/2025, ISBN: 978-81- 983133-6-2.

Department of Civil Engineering

Departmental achievements

Year: 2024-2025 Name of the participant: Mr. Souradeep Roy , Designation: Assistant Professor Title of the conference:, "Groundwater Recharge by Rainwater Harvesting – A Case Study," published in book INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS: 1st Edition, 30/05/2025, ISBN: 978-81- 983133-6-2.

Year: 2024-2025 Name of the participant: Mr. Krishnendu Kundu, Designation: Assistant Professor Title of the conference:, "Low-End Semi Rigid Pavement Solutions for Rural Areas," published in book INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS: 1st Edition, 30/05/2025, ISBN: 978-81-983133-6-2.

Year: 2024-2025 Name of the participant: Mr. Souradeep Roy, Designation: Assistant Professor Title of the conference:, "Low-End Semi Rigid Pavement Solutions for Rural Areas," published in book INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS: 1st Edition, 30/05/2025, ISBN: 978-81-983133-6-2.

Year: 2024-2025 Name of the participant: Mr. Baibaswata Das, Designation: Assistant Professor Title of the conference:, "Low-End Semi Rigid Pavement Solutions for Rural Areas," published in book INNOVATIVE PATHWAYS:INTERDISCIPLINARY ENGINEERING INSIGHTS: 1st Edition, 30/05/2025, ISBN: 978-81-983133-6-2.

Year: 2024-2025 Name of the participant: Mr. Souradeep Roy, Designation: Assistant Professor Title of the conference:, ""Fresh Water Production Using Solar Energy," published in book INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS: 1st Edition, 30/05/2025, ISBN: 978-81-983133-6-2.

Year: 2024-2025 Name of the participant: Mr. Sourav Kumar Singha, Designation: Assistant Professor Title of the conference:, ""Fresh Water Production Using Solar Energy," published in book INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS: 1st Edition, 30/05/2025, ISBN: 978-81-983133-6-2.

Year: 2024-2025 Name of the participant: Mr. Krishnendu Kundu, , Designation: Assistant Professor Title of the conference:, ""Fresh Water Production Using Solar Energy," published in book INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS: 1st Edition, 30/05/2025, ISBN: 978-81-983133-6-2.

Department of Civil Engineering

Departmental Events

Sl. No.	Event Type	Title	Speaker	Date	Organizer/Institute
1	Conference	Recent Advancement in the Field of Engineering and Technology	Prof. Dr. Babusena Paul, Prof. Dr. Rana Roy, Prof. Dr. Nilanjan Dey	15-16/05/2025	Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex (SurTech)
2	Webinar	Fly ash Management in Thermal Power Plant for sustainable development	Dr. Ananta Kr. Das	28/02/2023	MAKAUT
3	Webinar	Celebration of 25th GIS Day	Ankita Sindhu	20/11/2024	ESRI India
4	Webinar	Alumni Talk: An Experimental Investigation on Hot Mix Asphalt Using Hydrated Lime	Mr. Yeshpal	30/09/2024	NIT Meghalaya
5	Seminar	Study abroad benefits and the way for it	Sangeeta Das and Disha Roy Chowdhury	18/09/2024	IMPERIAL—Overseas Educational Consultant
6	Seminar	Sustainable Ground Improvement Techniques by Adopting Ecofriendly Natural Geotextiles	Mr. Pradip Kr. Choudhury	13/09/2024	IJIRA & National Jute Board
7	Webinar	Structural health monitoring (SHM) using artificial intelligence (AI)	Mr. Tanmay Das	30/08/2024	NIT Rourkela
8	Webinar	Application of Geospatial and Contemporary Techniques for Identifying Suitable Sites for Dam Construction	Dr. Arkadeep Dutta	31/07/2024	JIS University
9	Workshop	Application of MS Project Software	Mr. Sandip Banerjee	09/04/2025	ACC Limited / CADD Centre Ultadanga
10	Workshop	Application of Total Station followed by Career Counselling Seminar	Mr. Baibaswata Das and Mr. Souvik Chakraborty	04/04/2025	SurTech
11	Workshop	IMPORTANCE OF BIM SOFTWARES IN CIVIL ENGINEERING	Ishita Ghosh and Somnath Chanda	11/11/2024	SurTech
12	Workshop	How to Prevent yourself from Financial Frauds	Purvi Mehrotra	29/10/2024	Arthnirmiti

Department of Civil Engineering

Departmental achievements

Faculty achievements :

Name	FDP Title	Duration (Days)	Date From	Date To	Organizer
Krishnendu Kundu	Waste to Wealth Innovation	6	02.12.2024	07.12.2024	NITTTR
Krishnendu Kundu	Sustainable and Resilient Infrastructure Development Using Advanced Materials and Technology	5	16.12.2024	20.12.2024	Sanaka Educational Trust's Group of Institute
Krishnendu Kundu	Building Skills for Advanced Cognitive Assessment	5	03.03.2025	07.03.2025	DSCSITSC
Krishnendu Kundu	Bridging Research & Funding: Unlocking Grants for Industry & Academia	5	07.04.2025	11.04.2025	DSCSITSC
Souradeep Roy	Waste to Wealth Innovation	6	02.12.2024	07.12.2024	NITTTR
Souradeep Roy	Advancing Energy Transition: Strategies for Sustainability and Climate Resilience	6	25.11.2024	30.12.2024	JIS School of Polytechnic
Souradeep Roy	Sustainable and Resilient Infrastructure Development Using Advanced Materials and Technology	5	16.12.2024	20.12.2024	Sanaka Educational Trust's Group of Institute
Souradeep Roy	Building Skills for Advanced Cognitive Assessment	5	03.03.2025	07.03.2025	DSCSITSC
Souradeep Roy	Bridging Research & Funding: Unlocking Grants for Industry & Academia	5	07.04.2025	11.04.2025	DSCSITSC
Baibaswata Das	Waste to Wealth Innovation	6	02.12.2024	07.12.2024	NITTTR

Department of Civil Engineering

Departmental achievements

Faculty achievements :

Name	FDP Title	Duration (Days)	Date From	Date To	Organizer
Krishnendu Kundu	Waste to Wealth Innovation	6	02.12.2024	07.12.2024	NITTTR
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Souradeep Roy	Sustainable and Resilient Infrastructure Development Using Advanced Materials and Technology	5	16.12.2024	20.12.2024	Sanaka Educational Trust's Group of Institute
Souradeep Roy	Building Skills for Advanced Cognitive Assessment	5	03.03.2025	07.03.2025	DSCSITSC
Souradeep Roy	Bridging Research & Funding: Unlocking Grants for Industry & Academia	5	07.04.2025	11.04.2025	DSCSITSC
Baibaswata Das	Waste to Wealth Innovation	6	02.12.2024	07.12.2024	NITTTR
Baibaswata Das	Sustainable Civil Engineering Construction Materials in Infrastructure and Industry	6	06.01.2025	11.01.2025	NIT Raipur

Department of Civil Engineering

Departmental achievements

Faculty achievements :

Name	FDP Title	Duration (Days)	Date From	Date To	Organizer
Baibaswata Das	Building Skills for Advanced Cognitive Assessment	5	03.03.2025	07.03.2025	DSCSITSC
Baibaswata Das	Bridging Research & Funding: Unlocking Grants for Industry & Academia	5	07.04.2025	11.04.2025	DSCSITSC
Sourav Kumar Singha	Waste to Wealth Innovation	6	02.12.2024	07.12.2024	NITTTR
Sourav Kumar Singha	Advancing Energy Transition: Strategies for Sustainability and Climate Resilience	6	25.11.2024	30.12.2024	JIS School of Polytechnic
Sourav Kumar Singha	Sustainable and Resilient Infrastructure Development Using Advanced Materials and Technology	5	16.12.2024	20.12.2024	Sanaka Educational Trust's Group of Institute
Sourav Kumar Singha	Building Skills for Advanced Cognitive Assessment	5	03.03.2025	07.03.2025	DSCSITSC
Sourav Kumar Singha	Bridging Research & Funding: Unlocking Grants for Industry & Academia	5	07.04.2025	11.04.2025	DSCSITSC
Souvik Chakraborty	Sustainable Engineering Practices: Integrating Energy Efficiency and Climate Change Resilience	6	16.12.2024	21.12.2024	TTAADC Polytechnic Institute
Souvik Chakraborty	Emerging Technologies in Power Energy: Shaping the Future of Sustainable Solutions	6	19.11.2024	23.12.2024	Dream Institute of Technology, Kolkata
Souvik Chakraborty	Research Methodology & Research Paper Writing in Management & Social Sciences	5	04.11.2024	08.11.2024	Guru Nanak Institute of Technology
Souvik Chakraborty	Advances in Materials Science for Sustainable Development and Industrial Applications	6	10.02.2025	15.02.2025	DSCSITSC

Department of Civil Engineering

Departmental achievements

Faculty achievements :

Name	FDP Title	Duration (Days)	Date From	Date To	Organizer
Krishnendu Kundu	Waste to Wealth Innovation	6	02.12.2024	07.12.2024	NITTTR
Krishnendu Kundu	Sustainable and Resilient Infrastructure Development Using Advanced Materials and Technology	5	16.12.2024	20.12.2024	Sanaka Educational Trust's Group of Institute
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Krishnendu Kundu	Bridging Research & Funding: Unlocking Grants for Industry & Academia	5	07.04.2025	11.04.2025	DSCSITSC
Souradeep Roy	Waste to Wealth Innovation	6	02.12.2024	07.12.2024	NITTTR
Souradeep Roy	Advancing Energy Transition: Strategies for Sustainability and Climate Resilience	6	25.11.2024	30.12.2024	JIS School of Polytechnic
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Souradeep Roy	Bridging Research & Funding: Unlocking Grants for Industry & Academia	5	07.04.2025	11.04.2025	DSCSITSC
Baibaswata Das	Waste to Wealth Innovation	6	02.12.2024	07.12.2024	NITTTR

Department of Civil Engineering

Departmental achievements

Faculty achievements :

Authors	Title	Type	Publisher	ISBN	Edition	Date
Souradeep Roy, Sourav Kumar Singha, Arijit Acharyya, Subhojit Chattaraj	Assessing the Viability of Biological Treatment Methods for Stabilizing Municipal Solid Waste in Urban India	Book Chapter	CHYREN PUBLICATION, Palwal, Haryana	978-93-49076-28-0	1st Edition	17/02/2025
Krishnendu Kundu, Baibaswata Das, Souvik Chakraborty, Suvrajit Banerjee	Traffic Management in Kolkata During Major Sporting Events and Its Impact on Traffic Jam and Environmental Quality: A Case Study	Book Chapter	CHYREN PUBLICATION	978-93-49076-27-3	1st Edition	15/03/2025
Souvik Chakraborty, Sourav Kumar Singha, Baibaswata Das, Krishnendu Kundu, Souradeep Roy	Coastal Water Purification Strategies for Agricultural Needs at South 24 Parganas, West Bengal (WB)	Journal Paper	Zenodo	N/A	N/A	N/A
Sandip Sarkar, Sandeepan Saha, Subhojit Chattaraj, Baibaswata Das, Souradeep Roy, Deep Chatterjee	A Review on the Compatibility for Implementation of Rainwater Harvesting System	Journal Paper	Zenodo	N/A	N/A	N/A
Sourav Kumar Singha, Baibaswata Das, Souradeep Roy, Soham Chatterjee	Groundwater Recharge by Rainwater Harvesting – A Case Study	Book Chapter	INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS	978-81-983133-6-2	1st Edition	30/05/2025
Krishnendu Kundu, Souradeep Roy, Baibaswata Das	Low-End Semi Rigid Pavement Solutions for Rural Areas	Book Chapter	INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS	978-81-983133-6-2	1st Edition	30/05/2025
Souradeep Roy, Sourav Kumar Singha, Krishnendu Kundu	Fresh Water Production Using Solar Energy	Book Chapter	INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS	978-81-983133-6-2	1st Edition	30/05/2025
Souradeep Roy, Sourav Kumar Singha, Baibaswata Das, Krishnendu Kundu	Overhead Power Transmission Line Fault Detection & Analysis System Using Microcontroller	Book Chapter	CRDEEP Publication	N/A	N/A	N/A

Department of Civil Engineering

Departmental achievements

Faculty achievements :

Inventor	Patent Title
Baibaswata Das	Recycling of Coal Dust and Fly Ash as Replacement of Fine Aggregate and Cement for Manufacturing of Sustainable Construction Material
Baibaswata Das	Drip irrigation in rice cultivation under system of rice intensification (SRI)
Baibaswata Das	Low-cost, high-efficiency solar inverter for small-scale energy systems
Sourav Kumar Singha	Development of self-healing concrete using microbial and chemical admixtures for enhanced durability
Sourav Kumar Singha	Real-time solar radiation monitoring system using deep learning and image processing
Souvik Chakraborty	Development of self-healing concrete using microbial and chemical admixtures for enhanced durability
Souvik Chakraborty	Wearable device for real-time monitoring of vital signs using AI and optical sensors

Department of Civil Engineering

Departmental achievements

Faculty achievements :

Sl. No	Name	Designation	Type of Award
1	Baibaswata Das	Assistant Professor	JIS Samman Award for Highest Number of Patent Published (Institution)
2	Baibaswata Das	Assistant Professor	JIS Puroskar Award for Highest Number of Patent Published (Department)
3	Baibaswata Das	Assistant Professor	JIS Innovation Award for Faculty Publication
4	Baibaswata Das	Assistant Professor	JIS Innovation Award for Faculty Publication
5	Souvik Chakraborty	Assistant Professor	JIS Innovation Award for Faculty Publication

Department of Civil Engineering

Departmental achievements

Student achievements :

Name	Batch	Award Name	Award Category	Level
Soham Chatterjee	2024	JIS Samman Award	Highest number of Publication	Institutional Level
Diptyendu Chatterjee	2024	JIS Samman Award	Highest number of Publication	Institutional Level
Sohan Chakraborty	2024	JIS Samman Award	Highest number of Publication	Institutional Level
Diptyendu Chatterjee	2024	JIS Samman Award	Best Student	Departmental Level
Soham Chatterjee	2024	JIS Puroskar Award	Highest number of Publication	Departmental Level
Diptyendu Chatterjee	2024	JIS Puroskar Award	Highest number of Publication	Departmental Level
Sohan Chakraborty	2024	JIS Puroskar Award	Highest number of Publication	Departmental Level
Soham Chatterjee	2024	JIS Innovation Award	Student Publication	Institutional Level
Diptyendu Chatterjee	2024	JIS Innovation Award	Student Publication	Institutional Level
Sohan Chakraborty	2024	JIS Innovation Award	Student Publication	Institutional Level
Dip Narayan Dey	2024	JIS Innovation Award	Student Publication	Institutional Level
Gourav Dey	2024	JIS Innovation Award	Student Publication	Institutional Level
Saumyadip Kar	2024	JIS Innovation Award	Student Publication	Institutional Level
Sudipta Bhowmik	2024	JIS Innovation Award	Student Publication	Institutional Level
Dibendu Ghosh	2024	JIS Innovation Award	Student Publication	Institutional Level
Suparna Polley	2024	JIS Innovation Award	Student Publication	Institutional Level
Sourav Naskar	2024	JIS Innovation Award	Student Publication	Institutional Level
Yalambar Rai	2024	JIS Innovation Award	Student Publication	Institutional Level

Department of Civil Engineering

Departmental achievements

Student achievements :

Student Name(s)	Passout Year	Title/Description	Publication/Event	ISBN/ISSN/Other Details
Muskan Kumari	B.Tech CE 2025	Comparative analysis of converting fresh water from Brackish water at South 24 Parganas, West Bengal	Proceedings of National Conference on Sustainable Civil Engineering and Infrastructural Construction	978-81-982807-7-0
Sumit Chatterjee	B.Tech CE 2025	Impact of Himalayan Glacier Melt Due to Rise of Temperature and Resulting in Ecological Imbalance Its Mitigation Strategies	Proceedings of National Conference on Sustainable Civil Engineering and Infrastructural Construction	978-81-982807-7-0
Soham Chatterjee, Diptyendu Chatterjee, Sohan Chakraborty, Dip Narayan Sen, Gourab Dey	B.Tech CE 2024	Review on Application of Cold Mix Asphalt	International Journal of Scientific Research in Science and Technology (IJSRST)	Online ISSN: 2395-602X, Print ISSN: 2395-6011, Volume 11, Issue 18, pp.74-82, March-April-2024
Soham Chatterjee, Diptyendu Chatterjee, Sohan Chakraborty	B.Tech CE 2024	Low-Cost Pavement Work in a Rural Area	International Journal of Scientific Research in Science and Technology (IJSRST)	Online ISSN: 2395-602X, Print ISSN: 2395-6011, Volume 11, Issue 18, pp.90-96, March-April-2024
Subhajit Gorai, Soham Dasgupta, Shangkur Roy, Bikram Dhar	Diploma CE 2025, Diploma CE 2026	Advancing Technologies and Strategies for Achieving Carbon Neutrality	International Conference in Recent Advancement in the field of Engineering and Technology (RAFET 2025)	N/A
Disha Roy, Neelanjana Saha, Debarjun Das, Nikhil Kumar, Paumisa Sarkar	B.Tech CE 2025, B.Tech CE 2027	Sustainable pavement construction: A systematic literature review of environmental and economic analysis of recycled materials	International Conference in Recent Advancement in the field of Engineering and Technology (RAFET 2025)	N/A

Department of Civil Engineering

Departmental achievements

Student achievements :

Student Name(s)	Passout Year	Title/Description	Publication/Event	ISBN/ISSN/Other Details
Debjyoti Mondal, Roshan Minj, Gourab Baine, Souvick Maity, Ankan Roy	B.Tech CE 2025	Utilizing Renewable Energy in Sustainable Building Design	International Conference in Recent Advancement in the field of Engineering and Technology (RAFET 2025)	N/A
Srijit Bhattacharya, Aritra Deb, Tanmoy Sarkar	B.Tech CE 2026	Infrastructural Development of Engineered Landfills	International Conference in Recent Advancement in the field of Engineering and Technology (RAFET 2025)	N/A
Koushik Chakraborti	M.Tech (Structural Engineering) 1st Year 2nd Semester	Development and Applications of Special Concretes	NPTEL	N/A
51 students	B.Tech CE 2025	1 month Internship	Reputed government and private industries like L&T Construction, Public Works Department, etc.	N/A
Ripan Sarkar, Nabin Kumar Sarkar, Dhiraj Kumar Biswas	B.Tech CE 2026	Stood 1st runners up in the Annual Technical fest "MANTHAN 2K25"	Sr. Sudhir Chandra Sur Institute of Technology and Sports Complex	N/A

Department of Civil Engineering

Departmental achievements

FACULTIES COMPLETING MOOCS

SL No.	Faculty Name	Details of MOOCS	Provided by	From Date	To Date
1	Krishnendu Kundu	Business Analysis & Process Management	COURSERA	15/10/2024	20/11/2024
2	Krishnendu Kundu	Build a free website with WordPress	COURSERA	10/10/2024	09/11/2024
3	Souradeep Roy	Business Analysis & Process Management	COURSERA	02/10/2024	29/10/2024
4	Souradeep Roy	Build a free website with WordPress	COURSERA	01/10/2024	28/10/2024
5	Baibaswata Das	Business Analysis & Process Management	COURSERA	02/10/2024	29/10/2024
6	Baibaswata Das	Build a free website with WordPress	COURSERA	01/10/2024	28/10/2024
7	Sourav Kumar Singha	Business Analysis & Process Management	COURSERA	02/10/2024	29/10/2024
8	Sourav Kumar Singha	Build a free website with WordPress	COURSERA	01/10/2024	28/10/2024
9	Sourav Kumar Singha	Spatial Data Science_ The New Frontier in Analytics	ESRI	28/08/2024	19/10/2024
10	Sourav Kumar Singha	Make an Impact with Modern Geo Apps	ESRI	24/09/2024	22/10/2024
11	Souvik Chakraborty	Business Analysis & Process Management	COURSERA	30/04/2025	30/05/2025
12	Souvik Chakraborty	Build a free website with WordPress	COURSERA	30/04/2025	30/05/2025

STUDENTS COMPLETING MOOCS

SL No.	Student Name	Stream	Year and Semester	Details of MOOCS	Provided by
1	Koushik Chakraborti	M.Tech in Structural Engineering	1 st Year 2 nd Semester	Development and Applications of Special Concretes	NPTEL

DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPORTS COMPLEX

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Website:

www.surtech.edu.in, Email: info@dsec.ac.in

Affiliated to Maulana Abul Kalam Azad University of Technology West Bengal,
WBSCTVESD and Approved by AICTE

Department of Automobile Engineering

ANNUAL REPORT 2024-25

Department of Automobile Engineering

Vision of the department

To be recognized as a space of excellent education and quality research in the field of Automobile Engineering by adapting transformative teaching-learning process to produce ethical professionals, innovators and entrepreneurs capable of developing the society.

Mission of the department

DM1: To provide the students an excellent academic environment where ethical values will be disseminated along with leadership skills, leading to meaningful contributions towards our society.

DM2: To develop a comprehensive R&D Ecosystem so that the students, faculties can innovate as per societal needs.

DM3: To continuously upgrade the excellence of faculties through Workshops, FDPs and Seminars with the objective to connect with the rapidly changing technologies.

DM4: To collaborate with Industries, Professional Societies and Educational Institutions for the continuous betterment of the students to become Industry-Ready/ Entrepreneurs.

DM5: To practice updated teaching-learning methodologies where fundamental engineering concepts will be blended with different project experiences at all levels of the curriculum to generate new knowledge for the society.

Department of Automobile Engineering

Program Outcomes

- * **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- * **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- * **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- * **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- * **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- * **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- * **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Department of Automobile Engineering

- * **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- * **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- * **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- * **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- * **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Department of Automobile Engineering

Program Educational Objective (PEO)

Department of Automobile Engineering expects its B. Tech graduates to achieve the following after the completion of the program:

PEO1: Graduates will be working as professionals in different Automobile Engineering sectors like design, operations, systems and production.

PEO2: Graduates will be solving complex problems to innovate new solutions using modern tools with the ethical responsibility to meet society requirements.

PEO3: Graduates will be engaged in lifelong learning by doing higher studies, research and being members of professional societies.

Department of Automobile Engineering

Program Specific Outcomes (PSOs)

PSO1: Problem-Solving Skills

Ability to conduct critical analysis and utilize problem-solving techniques, necessary for carrying out research activities in the fields of Automobile Engineering like Engine Testing & Performance Measurement, Alternative fuels and Pollution Control, CAD/CAM and Vehicle Maintenance and Diagnostics.

PSO2: Professional Skills

Ability to plan, design & conduct experiments and simulate the real-life situations involved in Automobile Engineering utilizing efficient, environmental-friendly, sustainable, cost-effective conventional and/or computational methodologies; while operating autonomously or industrial environments.

PSO3: Leadership & Inter-personal Skills

Capacity to compete in the available employment prospects ethically and able to lead, manage, communicate while working in a team proficiently in the Automotive and allied domains.

Department of Automobile Engineering

Brief Overview of the Department

The Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex was established in 2009, alongside the inception of the Department of Automobile Engineering. The department began with a four-year B.Tech program, accommodating 60 students, and in 2014, it expanded to include a Diploma in Automobile Engineering, also with an intake of 60 students.

The department's primary objective is to produce highly skilled and competent automotive engineers who possess practical experience and are well-versed in the latest advancements in automotive technology. This approach ensures a steady supply of qualified professionals who can bridge the gap between industry demands and academic training. This is achieved through the department's advanced laboratory facilities, which provide students with hands-on training in various specialized areas of automobile engineering.

Automobile engineering students are exposed to a range of engineering disciplines, including mechanical, electrical, electronic, and industrial design. This multidisciplinary approach allows them to develop a comprehensive understanding of the field.

Department of Automobile Engineering

HOD Message

Dear colleagues and students,

I am glad to share with you the Newsletter from the Dr. Sudhir Chandra Institute of Technology and Sports Complex's Automobile Engineering Department. The Newsletter focuses on all Departmental Activities, illuminating the acts, events, and proceedings in which our Departmental Faculty Members and Students have enthusiastically engaged.

We are confident that you will be resourceful enough to take advantage of this circumstance in your lives. We must immediately begin fighting after failing and falling. This is how heroic tales of tenacity and perseverance will be created. The Department of Automobile Engineering makes a commitment to support you in all of your undertakings. So pay attention to your coursework. Pay attention to your lives and work to improve them every day. We are available to assist you. As the mentor of the Automobile Engineering Department and on behalf of the entire faculty, I would want to reassure you that we are here to look out for you and that we will always give you the greatest education possible.

Dr. Hrishiraj Ranjan

Head of the Department

Automobile Engineering Department, DSCSITSC

Department of Automobile Engineering

Faculty Publication

Sl. No.	Name of the Faculty Members	Title	Publication Type	Published/ Organized by	Details of Publication (DOI / ISSN / ISBN)
1	Kalyan Mukherjee, Shankha Ghosh, Pritam Bhattacharjee	A Review on Water Pyrolysis Oil	Book Chapter	Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex	978-81-983133-6-2
2	Kalyan Mukherjee, Shankha Ghosh, Pritam Bhattacharjee	Characterization of Pyrolysis Plastic Oil as Alternative Fuel	Book Chapter	Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex	978-81-983133-6-2
3	Shankha Ghosh, Kalyan Mukherjee, Pritam Bhattacharjee	Fabrication of Compressed Air Engine	Book Chapter	Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex	978-81-983133-6-2
4	Shankha Ghosh, Kalyan Mukherjee, Pritam Bhattacharjee	Design and Fabrication of Solar Powered Wheel Chair	Book Chapter	Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex	978-81-983133-6-2
5	Debjit Misra	Reduction of Burr in Drilling Using a Step Drill	Book Chapter	Advances in Materials, Manufacturing and Design, Springer Nature Singapore Pte. Ltd. 2025	https://doi.org/10.1007/978-981-97-6667-3_47
6	Kalyan Mukherjee, Pritam Bhattacharjee	A Review on synthesis, application and performance of oil extracted from waste plastic	Journal	Journal of Xidian University	https://doi.org/10.5281/Zenodo.15210875
7	Debjit Misra	Development and Characterization of Nickel-Based Self-Lubricating Electroless Composite Coatings Involving SiC and hBN	Journal	Journal of Materials Engineering and Performance	https://doi.org/10.1007/s11665-025-11210-9

Department of Automobile Engineering

Student Publication

Sl. No.	Name of Students	Name of the Supervising Faculty	Title of the Publication	Date of the Publication	Name of the Book / Chapter / Conference / Journal	ISBN / ISSN / DOI Number of the Publication	Name of the Publisher
1	Sudeep Banerjee, Somdip Ghosh, Dipankar Ram	Kalyan Mukherjee, Shankha Ghosh, Pritam Bhattacharjee	Alcohol Additives in Biodiesel: Type, Properties, and Their Effects: Review	16/05/2025	International Journal of Scientific Research in Science and Technology	ISSN: 2395-602X https://doi.org/10.32628/IJSRST25121431	International Conference on Recent Advancement in the Field of Engineering and Technology (RAFET)
2	Md Naseer Hossain	Kalyan Mukherjee, Pritam Bhattacharjee, Shankha Ghosh	Production of Biofuels From Waste Food and Vegetables for Engine Applications: A Review	16/05/2025	International Journal of Scientific Research in Science and Technology	ISSN: 2395-602X https://doi.org/10.32628/IJSRST25121433	International Conference on Recent Advancement in the Field of Engineering and Technology (RAFET)
3	Sayan Das, Debjit Ghosh	Shankha Ghosh, Kalyan Mukherjee, Pritam Bhattacharjee	Review on a Solar Powered Vehicle	16/05/2025	International Journal of Scientific Research in Science and Technology	ISSN: 2395-602X https://doi.org/10.32628/IJSRST25121434	International Conference on Recent Advancement in the Field of Engineering and Technology (RAFET)
4	Tuhin Chakraborty	Kalyan Mukherjee, Shankha Ghosh, Pritam Bhattacharjee	Review of Biofuel from Waste Cooking Oil for Compression Ignition Engines	16/05/2025	International Journal of Scientific Research in Science and Technology	ISSN: 2395-602X https://doi.org/10.32628/IJSRST25121432	International Conference on Recent Advancement in the Field of Engineering and Technology (RAFET)
5	Swakshar Mitra	Kalyan Mukherjee, Shankha Ghosh, Pritam Bhattacharjee	Biodiesel Blends and Engine Performance Analysis using Python Programming: A Review	16/05/2025	International Journal of Scientific Research in Science and Technology	ISSN: 2395-602X https://doi.org/10.32628/IJSRST25121436	International Conference on Recent Advancement in the Field of Engineering and Technology (RAFET)

Department of Automobile Engineering

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STAMP DUTY PAID IN TAMILNADU VIDE DOCUMENT REFERENCE NUMBER EF979145

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("MoU") is made and executed on the Execution Date at Hosur, Tamil Nadu:

BY AND BETWEEN

Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex, an institute incorporated under the provisions of University Grants Commission Act, 1956 having office at 540, Dum Dum Road, Kolkata-700074 (hereinafter referred to as "**INSTITUTE or SURTECH**" which expression shall mean and include its successors-in-interest and permitted assigns), represented by its **Principal, Mr. Saradindu Panda**, of the First Part.

AND


TVS Motor Company Limited, a company incorporated under the provisions of the Indian Companies Act, 1956, subsisting under the Companies Act, 2013 having its, at "Chaitanya", No. 12, Khader Nawaz Khan Road, Nungambakkam, Chennai - 600006, (hereinafter referred to as "**TVSM**" which expression shall mean and include its successors-in-interest and permitted assigns), represented herein by its **Executive Vice President Commercial Mobility Business, Mr. Rajat Gupta**, of the Second Part.

Institute and TVSM shall hereinafter collectively be referred to as the "**Parties**" and individually as a "**Party**".

WHEREAS:

- A. TVSM is inter alia engaged in the business of manufacture, sale, and marketing of powered two and three wheelers, and related spare parts thereof.
- B. SURTECH is an educational institution under the IIS Group, specializing in engineering education and technical programs. SURTECH focuses on quality technical education, research opportunities, and preparing students for industry careers.
- C. TVSM wishes to collaborate with the Institute to establish a **Center of Excellence (CoE) & Training Centre** for advanced automotive technologies at the Institute's premises located at 540, Dum Dum Road, Kolkata-700 074 (the "**Premises**").
- D. The Center of Excellence aims to serve as a hub for training, and skill development for TVSM Channel Partners, faculty, and Institute students ("**Purpose**"). The Institute has agreed to provide its Premises and TVSM has agreed to set up an on the terms and conditions as covenanted in this MoU and given its consent to co-operate and facilitate in organizing such Programs.

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Signed by:

MR/SURTECH009640F

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Signed by:

MR/IDDEACF824FE

Mou Signed with Department of Automobile Engineering, Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex and TVS Motor Company Limited on Dated 14-06-2025

Department of Automobile Engineering

Seminars / Webinars Conducted

Sl. No.	Date	Topic Name	Speaker
1	19/09/2024	Seminar on Automotive Safety	Mr. Abhilash Singh, Executive – Safety Riding – East, Safety Education & Centre Mgmt. – C&E, Honda Motorcycle & Scooter India Private Ltd., Kolkata
2	08/11/2024	Academia & Industrial Summit 2024 (in collaboration with Department of Mechanical Engineering)	Dr. Monojit Dutta, Chief of Research Group for Product Development at TATA Steel Prof. (Dr.) P.P. Chattopadhyay, Director of NIAMT and former Dean of IEST, Shibpur Prof. (Dr.) Manojit Ghosh, IEST-Shibpur, Visiting Prof. at University of Michigan, PhD from Delft University of Technology, Netherlands Associate Prof. (Dr.) Snehanshu Pal, IEST-Shibpur, Postdoctoral Fellow at Pennsylvania State Uni-versity, USA
3	18/11/2024 – 22/11/2024	The 5-day workshop on "Vehicle Maintenance" Organized for Memari Government Polytechnic College, Memari, Purba- Bardhaman	Mr. Arindam Mukherjee Teacher-in-Change Mr. Pritam Bhattacharjee Program coordinator Mr. Sandip Bhadra, Mr. Supriya Dhara, Technical Assistant, Department of Automobile Engineering, DSCSITSC
4	19/02/2025	Alumni Talk on Aftermarket Product Lifecycle Solutions	Mr. Sambit Pal, Technical Lead, John Deere, Pune
5	03/03/2025 – 07/03/2025	5-days Faculty Development Program (FDP) on “Building Skills for Advanced Cognitive Assessment” (in collaboration with Department of Electronics and Communication Engineering and Department of Civil Engineering)	Dr Vinay Kulkarni, Dean, Quality Assurance, D Y Patil College, Akurdi, Pune Prof. Mrunalini U Buradkar, St. Vincent Pallotti College of Engineering & Technology, Nagpur, Maharashtra
6	10/03/2025	Workshop on 3D Interactive Design and Simulation with CATIA	Mr. Bijoy Nashkar, Faculty Member, Ardent Computech Pvt. Ltd., Kolkata

Department of Automobile Engineering

Events Conducted

Sl. No.	Date	Topic Name	Speaker
7	01/04/2025 – 02/04/2025	Two-Day Workshop on “Advanced Fuel Injection Technology” Organized for Bengal Institute of Technology (BIT), Katwa	Mr. Sandip Bhadra, Mr. Supriya Dhara, Technical Assistant, Department of Automobile Engineering, DSCSITSC
8	07/04/2025 – 11/04/2025	5-days International Faculty Development Program (FDP) on “Bridging Research & Funding — Unlocking Grants for Industry & Academia” (in collaboration with Department of Mechanical Engineering and Department of Civil Engineering)	Dr. K. L. Sahoo, Chief Scientist, CSIR-NML, Jamshedpur Prof. Dr. Pankaj Kumar Roy, Former Director, School of Water Resources Engineering, Jadavpur University Prof. Dr. Koushik Biswas, Professor, IIT Kharagpur Dr. Surojit Gupta, Professor, University of North Dakota Dr. Nilrudra Mandal, Senior Principal Scientist, CSIR-CMERI, Durgapur
9	24/04/2025 – 25/04/2025	Two-Day Workshop on “Advanced Fuel Injection Technology (BS II – BS VI)” Organized for Nalhati Government Polytechnic College, Nalhati, Birbhum	Mr. Sandip Bhadra, Mr. Supriya Dhara, Technical Assistant, Department of Automobile Engineering, DSCSITSC
10	05/05/2025 – 06/05/2025	Two-Day Workshop on “Advanced Fuel Injection Technology (BS II – BS VI)” Organized for Ranaghat Government Polytechnic College, Ranaghat, Nadia	Mr. Sandip Bhadra, Mr. Supriya Dhara, Technical Assistant, Department of Automobile Engineering, DSCSITSC
11	15/05/2025 – 16/05/2025	International Conference on "Recent Advancement in The Field of Engineering and Technology" (in collaboration with Department of Electronics and Communication Engineering, Department Automobile Engineering and Department of Civil Engineering)	Prof. Dr. Babusena Paul, University of Johannesburg, Prof. Dr. Rana Roy, IIEST Shibpur, Prof. Dr. Nilanjan Dey, Techno International.

Department of Automobile Engineering

Industry Interaction

Sl. No.	Name of the Industry Visited	Date
1	Airport Authority of India (AAI), Dumdum	20/02/2025
2	Eicher, VE Commercial Vehicles Ltd., Dankuni	21/02/2025
3	One-Month Internship, Eicher, VE Commercial Vehicles Ltd., Dankuni	03/05/2025 – 03/06/2025

Department of Automobile Engineering

Faculty Achievements

Sl. No.	Name of the Faculty Members / Technical Assistants	Number of FDP Attended by Faculty Members	Number of MOOCs completed	No. of conferences attended
1	Dr. Hrishiraj Ranjan	02	01	--
2	Mr. Kalyan Mukherjee	04	03	02
3	Mr. Shankha Ghosh	06	03	01
4	Mr. Pritam Bhattacharjee	05	02	02
5	Mr. Sandip Bhadra	02	--	--
6	Mr. Supriya Dhara	02	--	--
7	Mr. Jayanta Si	01	--	--

- Dr. Hrishiraj Ranjan was the Session Chair of International Conference on "Recent Advancement in The Field of Engineering and Technology" from 15/05/2025 to 16/05/2025.
- Mr. Kalyan Mukherjee was Joint Convenor of 5-days Faculty Development Program (FDP) on "Building Skills for Advanced Cognitive Assessment" from 03/03/2025 to 07/03/2025.
- Mr. Kalyan Mukherjee was Joint Convenor of 5-days International Faculty Development Program (FDP) on "Bridging Research & Funding — Unlocking Grants for Industry & Academia" from 07/04/2025 to 11/04/2025.
- Mr. Kalyanmukherjee was the Joint Co-Convenor of International Conference on "Recent Advancement in The Field of Engineering and Technology" from 15/05/2025 to 16/05/2025.
- Mr. Kalyan Mukherjee and Mr. Pritam Bhattacharjee received JIS Samman 2025 awards for Highest Number of Students Publication on dated 01/02/2025 at Najrul Mancha.
- Mr. Kalyan Mukherjee, Mr. Pritam Bhattacharjee and Mr. Shankha Ghosh received JIS Innovation Award 2025 awards for Highest Number of Students Publication on dated 23/05/2025 at SurTech.

Department of Automobile Engineering

Student Achievements

- Supriya Dhara, 2025 passout student GATE-2025 Examination qualified with AIR 2620 Rank.
- Swakshar Mitra received best paper presentation for Track 1 in the International Conference on "Recent Advancement in The Field of Engineering and Technology" from 15/05/2025 to 16/05/2025.

DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPORTS COMPLEX

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Website:

www.surtech.edu.in, Email: info@dsec.ac.in

Affiliated to Maulana Abul Kalam Azad University of Technology West Bengal,
WBSCTVESD and Approved by AICTE

Department of Computer Science & Engineering

ANNUAL REPORT 2024-25

Department of Computer Science & Engineering

Vision of the department

To be recognized as an internationally acclaimed technical department by achieving excellent standards of quality technical education, keeping pace with the rapidly changing technologies, research and innovations and to produce Civil Engineers of global standards with the capability of accepting new challenges

Mission of the department

DM1: To impart fundamental knowledge of engineering and its practical application by developing state-of-the-art facilities for the department of Civil Engineering.

DM2: To nurture and build people in a rewarding and inspiring environment by fostering creativity, empowerment, innovation and entrepreneurship.

DM3: To build Industry – Institute linkage for quality improvement by promoting participation of industries in the area of consultancy

DM4: To encourage the students towards higher education through research and development activities

Department of Computer Science & Engineering

Program Outcomes

- * **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- * **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- * **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- * **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- * **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- * **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- * **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Department of Computer Science & Engineering

- * **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- * **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- * **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- * **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- * **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Department of Computer Science & Engineering

Program Educational Objective (PEO)

PEO1: Graduates will be able to take up technical/managerial roles involving problem analyzing, solving, designing, development to production support in software industries as well as in R&D sectors.

PEO2: Graduates will pursue higher education/research .

PEO3: Graduates will adapt, contribute and innovate advance technologies and systems in the key domains of Computer Science & Engineering.

PEO4: Graduates will be ethically and socially responsible.

Programme Specific Outcomes (PSOs)

PSO1: Learn and adapt the latest technologies in the field of computer science and engineering.

PSO2. Identify and analyze real life problems and provide software solutions.

Department of Computer Science & Engineering

Brief Overview of the Department

The Department of Computer Science & Engineering of DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPOTS COMPLEX was commenced in the year of 2009. This stream is aimed at providing training in Computer Engineering, software design and hardware-software integration instead of only Software Engineering or Electronic Engineering. Computer Engineers are involved in many hardware and software aspects of computing, from the design of individual microprocessors, personal computers and supercomputers to circuit design. This field of Engineering will not only make the students aware of how the computer systems work, but also help them understand how to integrate each of them to make them work in the bigger picture.

Soft skill programs are embedded as regular part of academics for better placements. Department is conducting parent's teachers meeting time to time for constant monitoring of academics and attendance of the students. For maintaining better feedback, mentor mentee meeting is held in the department periodically.

Department of Computer Science & Engineering

HOD Message

Dear colleagues and students,

I am thrilled to address you as the Head of the Computer Science & Engineering Department and share my enthusiasm for the incredible work and progress we have made together. As we embark on this new academic year, I would like to extend a warm welcome to all members including future engineers to be associated with the teaching learning and R&D activities in the department.

Our department of Computer Science & Engineering welcomes you in the fascinating world of reality vs. virtual reality, from modeling to simulation, from action to implementation of real-world dynamics, engineering, algorithms etc. The Department is dedicated to basic teaching and problem solving of mathematics, physics, environmental science etc. and its application in day-to-day life. e.g., bio-medical engineering, security engineering, robotics and IoT etc. The programme starts with basic needs of the students of the departments to prepare them for upcoming challenges and lifelong learning. The Department provides a blooming environment to both students and faculties. Department interacts with industries and research organizations for state-of-the-art technologies by signing MOUs. Wishing you all a successful and rewarding academic year!

Dr. Amrut Ranjan Jena

HOD, Department of Computer Science & Engineering

Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex

Department of Computer Science & Engineering

Departmental achievements

❑ RESEARCH PUBLICATION

➤ Dr. Amrut Ranjan Jena published "Machine Learning Approach to Credit Term Deposit in Banking Sector" in ISACS 2024 International Conference dated 13/11/2024 to 14/11/2024.

➤ Madhusmita Mishra published "A Framework for Sign Language Detection and Hand Gesture Recognition for Especially Abled People" in ISACS 2024 International Conference dated 13/11/2024 to 14/11/2024.

➤ MRS. CHANDRIMA SINHA ROY published Machine Learning Algorithm for Breast Cancer Prediction: A Comparative Study (ISACS 2024 International Conference dated 13/11/2024 to 14/11/2024).

➤ MR. ARNAB HAZRA published an IEEE conference paper titled "FedHZone: Federated Learning Based Hazardous Zone Detection Using Internet of Drone Things"(CCCI 2024 International Conference dated 16/10/2024 to 18/10/2024) in Beijing, China.

➤ MR. ARNAB HAZRA published a research paper titled "SoftWind: Software-defined trajectory correction modelling of gust wind effects on internet of drone things using glowworm swarm optimization" in Ad Hoc Networks journal, Elsevier on 01.10.2024

Department of Computer Science & Engineering

Departmental achievements

❑ RESEARCH PUBLICATION

➤ MRS. MOUSUMI OJHA published Machine Learning Algorithm for Breast Cancer Prediction: A Comparative Study (ISACS 2024 International Conference dated 13/11/2024 to 14/11/2024)

➤ MRS. MOUSUMI OJHA published Machine Learning Algorithm for Breast Cancer Prediction: A Comparative Study (ISACS 2024 International Conference dated 13/11/2024 to 14/11/2024)

➤ Dr. Amrut Ranjan Jena, Dr. Soumitra Roy, Ms. Madhusmita Mishra, Dr. Amitava Halder published "IOT INSIGHTS: DESIGN AND BUILD IOT APPLICATIONS".

Department of Computer Science & Engineering

Departmental Events

Seminar/ Workshop/ Conference Organized								
Sl. No.	Name of Visitor / Guest Speaker	Designation/ Occupation	Seminar/ Workshop/ Conference Topic	Total Participant	Date	Organized By (Dept. Name/Institute level)	Cost	Link of the Documents
1	Mr. Sajal Mitra	Senior Trainer, Toprankers	Seminar	80	26/07/2024	CSE & CSE(AI/ML)	NIL	Report-Seminar-26-07-24.pdf
2	Mr. Subhadip Chakraborty	Technical Architect, Cognizant Technology Solutions	Seminar	118	31/07/2024	CSE & CSE(AI/ML)	NIL	Reports SeminarCSE 31ST JULY- 2024-25.pdf
3	Mr. Niroja Kumar Goswami	Co-founder & CTO, SENZCRAFT TECHNOLOGIES	Webinar	108	13/09/2024	CSE & CSE(AI/ML)	NIL	Report-Industry Invited Talk-13-09-2024.pdf
4	CSE & CSE(AI/ML)	Conducted By the Department	Project Competition	164	04/09/2024	CSE & CSE(AI/ML)	NIL	Report 04-09 2024.pdf
5	ISACS 2024	Third International Conference on Innovations in Software Architecture and Computational Systems (ISACS 2024)	Conference	120	13/11/2024 & 14/11/2024	CSE & CSE(AI/ML)	NIL	Reports ISACS 2024 CSE 13th & 14th NOV- 2024-25.pdf

Department of Computer Science & Engineering

Departmental Events

Seminar/ Workshop/ Conference Organized								
Sl. No.	Name of Visitor / Guest Speaker	Designation/ Occupation	Seminar/ Workshop/ Conference Topic	Total Participant	Date	Organized By (Dept. Name/Institute level)	Cost	Link of the Documents
6	Mr. Inder Chopra	Senior Faculty & Mentor, TIME India Pvt. Ltd.	Seminar	69	24/02/2025	CSE and CSE(AI/ML)	NIL	Report_SeminarCSE_24 February 2025.pdf
7	Mr. Rahul Saha	System Engineer-Digital, TCS, Kolkata	Webinar	100	21/03/2025	CSE and CSE(AI/ML)	NIL	Reports_Alumni Talk_21 March-25.pdf
8	Mr. Anirban Bhowmik	Co-Founder, Logic Learn	Workshop	60	08/04/2025	Department of CSE and CSE(AI/ML)	NIL	Reports_Workshop_08-04_2025.pdf
9	Mr. Aman Ali	Expert, IAE Academy	Seminar	32	23/04/2025	CSE and CSE(AI/ML)	NIL	Report_Seminar_23-04-25
10	All Faculties	Parent Teachers Meet (PTM)	PTM	66	30/04/2025	CSE and CSE(AI/ML)	NIL	Report_PTMT_30-04-25.pdf
11	Prof. (Dr.) Asit Kumar Das	Department of CST, IEST Shibpur	FDP	50	19/05/2025 to 25/05/2025	CSE and CSE(AI/ML)	NIL	FDP_CSE_19-25-May-2025.pdf

Department of Computer Science & Engineering

Departmental Events

Industry Institute Interaction Activity

Sl. No.	Name of Dept.	Name of the Industry	Date of Visit	Organized by (Name & Designation)	Outcome	Link of the Documents
1	CSE	ObjectSol Technologies Pvt. Ltd.	22/08/2024 & 23/08/2024	Department of CSE & CSE(AI/ML)	The students got current technology trends, database connectivity, real life software and deployment of a project and others.They have also visited the R&D lab for testing.	View Document

Department of Computer Science & Engineering

Departmental achievements

Faculty achievements :

❑ Reviewer of reputed Journals:

Dr. Amrut Ranjan Jena

Dr. Debashis Das

➤ MRS. CHANDRIMA SINHA ROY published Machine Learning Algorithm for Breast Cancer Prediction: A Comparative Study (Conference dated 13/11/2024 to 14/11/2024).

➤ MR. ARNAB HAZRA secured “Top 2%” in NPTEL course “Cloud Computing” -July-Oct, 2024.

➤ MRS. MOUSUMI OJHA published Machine Learning Algorithm for Breast Cancer Prediction: A Comparative Study (Conference dated 13/11/2024 to 14/11/2024).

Department of Computer Science & Engineering

Departmental achievements

Faculty achievements :

- Dr. AMRUT RANJAN JENA attended a FDP entitled 'Innovative Applications and Ethical Considerations of Artificial Intelligence in Modern Research' at BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY from 25/11/2024 to 30/11/2024.
- Dr. AMRUT RANJAN JENA attended a FDP entitled 'Recent Advancements in Research Methodology & IPR' conducted by the IIC & Research Cell of JIS University from 23rd to 27th September 2024.
- Dr. AMRUT RANJAN JENA attended and completed 5 Day's Faculty Development Program on Building Skills for Advanced Cognitive Assessment from 03.03.2025 to 07.03.2025 organized by DSCSITSC.
- Dr. AMRUT RANJAN JENA has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Mrs. MADHUSMITA MISHRA attended a FDP entitled 'Innovative Applications and Ethical Considerations of Artificial Intelligence in Modern Research' at BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY from 25/11/2024 to 30/11/2024.
- Mrs. MADHUSMITA MISHRA attended and completed 5 Day's Faculty Development Program on Building Skills for Advanced Cognitive Assessment from 03.03.2025 to 07.03.2025 organized by DSCSITSC.
- Mrs. MADHUSMITA MISHRA has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Dr. Amitava Halder attended a FDP entitled "Communication, Signal Processing and Recent Technologies for Different Applications" organised by Department of Electronics and Communication Engineering, Budge Budge Institute of Technology kolkata, India held during 22/10/2024 to 28/10/2024.

Department of Computer Science & Engineering

Departmental achievements

Faculty achievements :

- Dr. Amitava Halder attended a FDP entitled 'Emerging Technologies in Power Energy: Shaping the Future of Sustainable Solutions' organised by Department of Electrical Engineering, Dream Institute of Technology, Kolkata from 19.11.2024 to 23.11.2024.
- Dr. Amitava Halder attended a FDP entitled 'Emerging Frontiers in AI: From Data Science to Generative AI and its Applications' from 09.12.2024 to 13.12.2024 organized by Department of Computer Science and Engineering, Andhra Loyola Institute of Engineering and Technology-Vijayawada.
- Dr. Amitava Halder has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Dr. Debashis Das has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Dr. Soumitra Roy has attended five days faculty development program on 'Innovation in Recent Trends and Research Applications on Computing and Informatics' organized by the Department of Information Technology in association with IQAC, Haldia Institute of Technology during 29 th July- 02 August, 2024.
- Dr. Soumitra Roy have participated in the FDP entitled "Mastering Machine Learning with R: Advancement Applications and Techniques fostering Career Development" hosted by the Mathematics Club in association with the Basic Science and Humanities Department of Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex during 19th-23rd August, 2024.
- Dr. Soumitra Roy attended and completed 5 Day's Faculty Development Program on Building Skills for Advanced Cognitive Assessment from 03.03.2025 to 07.03.2025 organized by DSCSITSC.

Department of Computer Science & Engineering

Departmental achievements

Faculty achievements :

- Mrs. Mousumi Ojha attended a FDP entitled 'Emerging Technologies and Security Recent Trends' organized by the Departments of Computer Science and Engineering, Computer Science and Business Systems and Computer Science and Engineering - AI/ML, Techno India University, Kolkata, India from 11th to 15th November, 2024.
- Mr. ANOY CHOWDHURY has participated in a 40 hours Faculty Development Programme on "AI-Based Problem-Solving Techniques" sponsored by Ministry of Electronics and Information Technology (Meity), GoI organized by E&ICT Academy, NIT Warangal, Telangana State and R&D Cell and Department of CSE, St. Peter's Engineering College, (SPEC), Hyderabad during 11th-21st December, 2024.
- Mr. Soham Mukherjee has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on 'Advanced Computational Techniques in Machine Learning: A Comprehensive Faculty Development Program Utilizing R Software' at UNIVERSITY OF ENGINEERING AND MANAGEMENT KOLKATA from 25/11/2024 to 30/11/2024.
- Mr. Soham Mukherjee attended a FDP entitled 'Emerging Technologies and Security Recent Trends' organized by the Departments of Computer Science and Engineering, Computer Science and Business Systems and Computer Science and Engineering - AI/ML, Techno India University, Kolkata, India from 11th to 15th November, 2024.
- Mr. Soham Mukherjee has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Pioneering the Future of Healthcare: Robotics, Deep Learning, and Emerging Tech. at ACADEMY OF TECHNOLOGY from 02/12/2024 to 07/12/2024.
- Mr. Arnab Hazra has participated in the 5-Day Online International Faculty Development Program on 'Research Methodology & Research Paper Writing in Management & Social Sciences' held from 4th to 8th November 2024, organized by GNIHM, Kolkata.

Department of Computer Science & Engineering

Departmental achievements

Faculty achievements :

- Dr. Soumitra Roy has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- MR. SANJOY BHATTACHARJEE attended a FDP entitled 'Advanced Computational Techniques in Machine Learning: A Comprehensive Faculty Development Program Utilizing R Software' at UNIVERSITY OF ENGINEERING AND MANAGEMENT KOLKATA from 25/11/2024 to 30/11/2024.
- MR. SANJOY BHATTACHARJEE attended a FDP entitled 'Emerging Technologies and Security Recent Trends' organized by the Departments of Computer Science and Engineering, Computer Science and Business Systems and Computer Science and Engineering - AI/ML, Techno India University, Kolkata, India from 11th to 15th November, 2024.
- MR. SANJOY BHATTACHARJEE has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- MRS. CHANDRIMA SINHA ROY attended a FDP entitled "Emerging Technologies and Security Recent Trends" organized by the Departments of Computer Science and Engineering, Computer Science and Business Systems and Computer Science and Engineering - AI/ML, Techno India University, Kolkata, India from 11th to 15th November, 2024.
- MRS. CHANDRIMA SINHA ROY attended a FDP entitled 'Exploring IoT & AI Frontier in Teaching and Research' Organized by Department of CSE(IoT) in association with HRDC, IEM-UEM Group, IEM IQAC & IEM-IETE Students' Forum held from 2nd September, 2024 to 6th September, 2024 with 80% Marks.
- MRS. CHANDRIMA SINHA ROY attended a FDP entitled 'Building Services in Smart City Through IoT-Edge-Fog-Cloud Federation' at National Institute of Technology Warangal from 09/12/2024 to 14/12/2024.

Department of Computer Science & Engineering

Departmental achievements

Faculty achievements :

- MRS. CHANDRIMA SINHA ROY has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Mrs. Mousumi Ojha has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on 'Building Services in Smart City Through IoT-Edge-Fog-Cloud Federation' at National Institute of Technology Warangal from 09/12/2024 to 14/12/2024.
- Mrs. Mousumi Ojha attended a FDP entitled 'Emerging Technologies and Security Recent Trends' organized by the Departments of Computer Science and Engineering, Computer Science and Business Systems and Computer Science and Engineering - AI/ML, Techno India University, Kolkata, India from 11th to 15th November, 2024.
- Mrs. Mousumi Ojha has participated in a 40 hours Faculty Development Programme on "AI-Based Problem-Solving Techniques" sponsored by Ministry of Electronics and Information Technology (Meity), GoI organized by E&ICT Academy, NIT Warangal, Telangana State and R&D Cell and Department of CSE, St. Peter's Engineering College, (SPEC), Hyderabad during 11th-21st December, 2024.
- Mrs. Mousumi Ojha, Assistant Professor has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Building the Next Wave of Indian Startups with Advanced Computing Technologies at SUPREME KNOWLEDGE FOUNDATION GROUP OF INSTITUTIONS from 06/01/2025 to 11/01/2025.
- Mrs. Mousumi Ojha has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.

Department of Computer Science & Engineering

Departmental achievements

Faculty achievements :

- Mr. ANOY CHOWDHURY has participated in a 40 hours Faculty Development Programme on "AI-Based Problem-Solving Techniques" sponsored by Ministry of Electronics and Information Technology (Meity), GoI organized by E&ICT Academy, NIT Warangal, Telangana State and R&D Cell and Department of CSE, St. Peter's Engineering College, (SPEC), Hyderabad during 11th-21st December, 2024.
- Mr. ANOY CHOWDHURY attended and completed 5 Day's Faculty Development Program on Building Skills for Advanced Cognitive Assessment from 03.03.2025 to 07.03.2025 organized by DSCSITSC.
- Mr. ANOY CHOWDHURY has successfully participated in one week online Faculty Development Programme on "Intelligent Computing Techniques and Its Engineering Applications (ICTEA-2025)" organized by Department of Computer Science and Engineering (NBA Accredited) of College of Engineering and Management, Kolaghat (CEMK), from 06 January - 10 January, 2025.
- Mr. ANOY CHOWDHURY has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Mr. Amal Kumar Saha has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Mr. Soham Mukherjee has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on 'Advanced Computational Techniques in Machine Learning: A Comprehensive Faculty Development Program Utilizing R Software' at UNIVERSITY OF ENGINEERING AND MANAGEMENT KOLKATA from 25/11/2024 to 30/11/2024.
- Mr. Soham Mukherjee attended a FDP entitled 'Emerging Technologies and Security Recent Trends' organized by the Departments of Computer Science and Engineering, Computer Science and Business Systems and Computer Science and Engineering - AI/ML, Techno India University, Kolkata, India from 11th to 15th November, 2024.

Department of Computer Science & Engineering

Departmental achievements

Faculty achievements :

- Mr. Soham Mukherjee has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Pioneering the Future of Healthcare: Robotics, Deep Learning, and Emerging Tech. at ACADEMY OF TECHNOLOGY from 02/12/2024 to 07/12/2024.
- Mr. Soham Mukherjee has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Mrs. Rebeka Sultana has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Mr. Arnab Hazra has participated in the 5-Day Online International Faculty Development Program on "Research Methodology & Research Paper Writing in Management & Social Sciences" held from 4th to 8th November 2024, organized by GNIHM, Kolkata.
- Mr. Arnab Hazra attended a FDP entitled "Emerging Technologies and Security Recent Trends" organized by the Departments of Computer Science and Engineering, Computer Science and Business Systems and Computer Science and Engineering - AI/ML, Techno India University, Kolkata, India from 11th to 15th November, 2024.
- Mr. Arnab Hazra has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on 'Pioneering the Future of Healthcare: Robotics, Deep Learning, and Emerging Tech' at ACADEMY OF TECHNOLOGY from 02/12/2024 to 07/12/2024.
- Mr. Arnab Hazra attended and completed 5 Day's Faculty Development Program on Building Skills for Advanced Cognitive Assessment from 03.03.2025 to 07.03.2025 organized by DSCSITSC.

Department of Computer Science & Engineering

Departmental achievements

Faculty achievements :

- Mr. Arnab Hazra has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- MS.MANISHA DAS has actively participated in one-week International online faculty development program on "Disruptive Technologies (IoT, Quantum Computing, Biomedical, 6G, AI)" organized by Abacus Institute of Engineering & Management from 2nd May to 7th May 2025.
- MS.MANISHA DAS has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Ms. Sayani Roy has participated in the online MDP entitled "Digital Proficiency Bootcamp" organized by Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex (An Autonomous Institute) held on 11-15 July, 2024 (5 Days).
- Ms. Sayani Roy has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Ms. Sayani Roy attended and completed 5 Day's Faculty Development Program on Bridging Research & Funding: Unlocking Grants for Industry & Academia from 07.04.2025 to 11.04.2025 organized by DSCSITSC.
- Ms. Deepta Debnath has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.
- Mr. Maheswer Das has participated in the online FDP entitled "RECENT ADVANCEMENTS IN INTELLIGENT AND SECURE COMPUTING" hosted by the Department of CSE in association with the Department of CSE(AIML) during 19-25 May, 2025.

Department of Computer Science & Engineering

Departmental achievements

Other achievements :

➤ Reviewer of reputed Journals:

Dr. Amrut Ranjan Jena

Dr. Debashis Das

➤ MRS. CHANDRIMA SINHA ROY published Machine Learning Algorithm for Breast Cancer Prediction: A Comparative Study (Conference dated 13/11/2024 to 14/11/2024).

➤ MR. ARNAB HAZRA secured "Top 2%" in NPTEL course "Cloud Computing" - July-Oct, 2024.

➤ MRS. MOUSUMI OJHA published Machine Learning Algorithm for Breast Cancer Prediction: A Comparative Study (Conference dated 13/11/2024 to 14/11/2024).

➤ The Department of CSE achieved "Best Department" Award in JIS SAMMAN 2025.

➤ Mrs. MADHUSMITA MISHRA received JIS Innovation Award 2025 for Faculty Publication.

➤ MS. SAYANI ROY received JIS SAMMAN Award 2025 for "Best Technical Assistant" (Institutional Level).

➤ Mrs. MADHUSMITA MISHRA received JIS Innovation Award 2025 for Faculty Publication.

➤ Dr. Soumitra Roy received JIS Innovation Award 2025 for Faculty Publication.

Department of Computer Science & Engineering

Departmental achievements

IPR FILED/PUBLISHED/GRANT

Sl	Ref No.	Applicant	Title of Invention	Inventor (s)	Type of Application	Patent Application No
1		Mrs. Chandrima Sinha Roy	PERSONALISED HEALTHCARE: MACHINE LEARNING-DRIVEN WEARABLE SENSOR MONITORING AND CLASSIFICATION	Mrs. Chandrima Sinha Roy	Published	202431065147
2		Mrs. Mousumi Ojha	AI BASED ELDERLY INDIVIDUAL FALL DETECTION DEVICE	Mrs. Mousumi Ojha	Published	6413624
3		Mrs. Mousumi Ojha	Robotic Medicine Picking and Delivering Machine	Mrs. Mousumi Ojha	Published	6412032

Department of Computer Science & Engineering

Departmental achievements

Student achievements :

Project competition winners list in different categories				
Sl. No.	Project name	Team members	Position	Category
1	Smart Water Management System	Sanjana Biswas Sampad Sen Soham Saha Sabarnik Lahiri Sashwat Kumar Sharma	Winner	Hardware-based
	Smart Irrigation System	Alina Roy	Runner-up	
2	Hired - ATS friendly resume builder and Hiring platform	Sayan Biswas	Winner	Software-based
	ProjectXplore	Parambrata Ghosh Jeet Mahapatra	Runner-up	
3	Driver drowsiness detection system	Pranjal Dey Soumyadeep Roy Neha Barman Shreya Mandal Gourabmoy Saha	Winner	Idea presentation
	SUDOG	Sanandita Saha Prashasati Saha	Runner-up	

Department of Computer Science & Engineering

Departmental achievements

Student achievements :

Student Participation in Smart India Hackathon (SIH) 2024

We would like to express our sincere congratulations to Team Hexabyte SurTech for their outstanding performance in the Software Edition of the Smart India Hackathon (SIH) 2024. The team made an impression at the national level competition because of their extraordinary talent, commitment, and teamwork, which was hosted at the Noida Institute of Engineering and Technology in Greater Noida, Uttar Pradesh.

Team Hexabyte SurTech, which competed using the problem statement supplied by the Government of the NCT of Delhi, made it to the final stages of SIH 2024. Only five teams made it to the finals out of over 330 teams that submitted creative ideas for the same statement. Team Hexabyte SurTech finished as the runner-up in a fiercely contested final, just missing the top spot by a slim margin.

The team showcased their ingenuity by designing and developing " Smart Classroom Management Software for Enhanced Learning Environments", an AI-powered digital platform aimed at a fully functional prototype of the Smart Classroom Management Software (SCMS) demonstrating the above features through the integration of advanced algorithms, data analytics, and cloud-based technologic. A user-friendly interface for students, teachers and administrators to interact with the system and access reports.

Team Details:

Team Name: Hexabyte SurTech

➤ Team Members:

Parthib Panja (CSE)
Parambrata Ghosh (CSE)
Hiranmay Pore (CSE)
Jeet Mahapatra (CSE)
Ankita Chatterjee (CSE)
Nabanita Chakraborty (CSE)

➤ Mentors:

Dr. Amrut Ranjan Jena, Associate Professor, CSE
Ms. Madhusmita Mishra, Assistant Professor, CSE

DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPORTS COMPLEX

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Website:

www.surtech.edu.in, Email: info@dsec.ac.in

Affiliated to Maulana Abul Kalam Azad University of Technology West Bengal,
WBSCTVESD and Approved by AICTE

Department of Electronics and Communication Engineering

ANNUAL REPORT 2024-25

Department of Electronics and Communication Engineering

Vision of the department

To create an educational environment to mold the students to meet the modern Electronics & Communication industry's challenges through state-of-the-art technical knowledge and innovative approaches. Our fundamental tenets are quality, equity, morality, environmental sustainability, energy-saving, and a strong dedication to the cause of technical education and service.

Mission of the department

DM1: To provide State-of-Art Technical Education.

DM2: To conduct research and innovation that will result in the manifestation of knowledge intellectual property.

DM3: To instill in students a sense of professional ethics and societal responsibility..

DM4: To inculcate teamwork and leadership to be industry-ready and employable.

DM5: To assist graduates in becoming an entrepreneur. skills in students

Department of Electronics and Communication Engineering

Program Outcomes

- * **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- * **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- * **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- * **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- * **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- * **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- * **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Department of Electronics and Communication Engineering

- * **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- * **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- * **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- * **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- * **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Department of Electronics and Communication Engineering

Program Educational Objective (PEO)

PE01: Knowledge of Basic Engineering Sciences: To demonstrate professional accomplishment in industry and academic organizations by demonstrating competence in mathematics, engineering fundamentals, electronics and communication engineering, and related subjects..

PE02: Engineering Design Skills: To provide the students with the required problem-solving abilities for general engineering design practice.

PE03: Problem Solving Ability: To develop engineering graduates who can solve problems and go onto advanced study and research in various fields.

PE04: Programming Skills: Exercising the computer programming skills in writing, testing and maintaining the programs for transforming every student to find employment in the field of Electronics, Science & Technology.

PE05: Technical Dexterity: To provide the knowledge of designing, building, and testing electronic systems for given specifications using hardware and software techniques in contemporary research and current industry trends.

PE06: Professional Competence: To implant professional and ethical mindset, strong communication skills, teamwork skills, leadership traits, management abilities in the students for a successful professional career and societal needs.

Department of Electronics and Communication Engineering

Programme Specific Outcomes (PSOs)

PSO1: To analyze, design, and develop solutions for current issues, as well as to use technical expertise to create high-quality products for the electronics and communication-based industries.

PSO 2: To develop creative concepts and solutions in RF & Communication, Networking, Embedded Systems, and VLSI in order to adapt to new information and communication technologies.

PSO3: The capacity to apply acquired technical knowledge to find employment in the electronics and communications industries as well as to succeed as an entrepreneur.

Department of Electronics and Communication Engineering

Brief Overview of the Department

The department of ECE started in 2009 with the capacity of 60 intakes in B.Tech and later added M.Tech courses in Communication Engineering in the year 2013. Both these courses are highly successful and the pass outs are able to contribute immensely in science and technology field.

Every year the successful students are placed in different upcoming domains such as modern telecommunication engineering, Nano technology, VLSI designs, embedded systems, high frequency RF technology, mobile communications, etc. The applicability of Electronics and Communication Engineering is in every aspect of modern technology and therefore it requires constant update with recent R&D practices. The students get enough opportunity to explore the fields of their interest while perusing their regular degrees.

Department of Electronics and Communication Engineering

HOD Message

I am delighted to share an overview of our department, which stands as a forerunner in driving academic excellence and holistic development. Our vibrant ecosystem showcases the notable achievements of both faculty and students, including placement successes, academic advancements, technical contributions, and a wide range of extracurricular engagements. The department thrives on the energy and enthusiasm of its stakeholders, all of whom are committed to contributing toward a greater vision. It is truly inspiring to witness the creativity and hidden talents of our students and faculty manifest in diverse and meaningful ways. We aim to foster an environment that encourages intellectual diversity and innovation, offering a dynamic platform for learning, exploration, and self-expression. I warmly welcome my colleagues, students, and peers from other departments of DSCSITSC to engage with us—through collaboration, feedback, and constructive suggestions—to help us grow and improve continuously. I gratefully acknowledge the unwavering support of the Principal, DSCSITSC, and the JIS Group management in all our initiatives and look forward to their continued encouragement in our future endeavors.

Dr. Anirban Neogi (HOD)

Dept. of Electronics & Communication Engineering

Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex

Department of Electronics and Communication Engineering

ECE DEPARTMENTAL NEWS AT A GLANCE

Departmental Events :

1. Seminar on "Alumni Talk" organized by Department of Electronics And Communication Engineering on 12 Aug. 2024.
2. 30 hours workshop on "A hands on Approach on C programming" on 16th Aug, 2024.
3. Department of ECE in association with SCIENCE AND TECHNOLOGY CLUB organized OBSERVATION OF CHANDRAYAN 2 LAUNCH on 22nd July, 2024
4. International Conference "Recent Advancement in The Field of Engineering and Technology "organized by Department ECE, CE & AUE on 15th and 16th May 2025
5. Expert Session on Nanophysics in Energy Applications Organized by epartment of Electronics and Communication Engineering (ECE) In association with IIC SurTech & Idea Lab On 2nd May 2025.
6. Department of ECE in association with Science & Technology Club, DSCSITSC Organized Industry Visit at ATS (Air Traffic System), Netaji Subhas Chandra Bose International Airport, Kolkata on 21st and 22nd November, 2024
7. Department of ECE in association with SCIENCE AND TECHNOLOGY CLUB Organized WORKSHOP ON IoT on 18th November, 2024.
8. Live Seminar on "Innovation and Entrepreneurship" from MoE organized by Department of Electronics and Communication Engineering in Association with IIC, DSCSITSC on 28th February, 2025.
9. Science and Technology Club of Dr Sudhir Chandra Sur Institute of Technology and Sports Complex organized the Inauguration of SRIC Lab and Inter School Science Model Competition on 8th August, 2024 during the celebration of 15th Anniversary of the establishment of College
10. Memorandum of Understanding (MOU) between Department of Electronics and Communication Engineering, Dr Sudhir Chandra Sur Institute of Technology and Sports Complex and Livid Design Inc. signed on 10th February 2025.
11. Seminar on "Rapid Prototyping and changes in current trend for Product development in Industry" organized by Department of Electronics and Communication Engineering, on 10th February 2025
12. Industry Collaborative Workshop on "VLSI Circuit Design using VHDL" Organized by The Department of ECE in association with IIC SurTech, IETE-ISF and Livid Design Inc. on 24th and 25th April, 2025.
13. Two-day industry visit at LIVID DESIGN INC. on 5th and 6th March, 2025

Department of Electronics and Communication Engineering

ECE DEPARTMENTAL NEWS AT A GLANCE

Student's achievements :

- All second and third year students have successfully completed a minimum of one COURSERA course as part of their MOOCS.
- Among the final year students, more than 60% of students from 2023 and 2024 pass out batch, have already received job offers from MNCs like Hexaware, Amazon, TCS, Capgemini, Tech Mahindra, Ericson.
- Debraj Kahar*, Saikat Mondal, Khushi Deo, Subhra Sen, Sneha Naskar, Dr Pradipta Maiti, Dr Anirban Neogi. Micro Strip Multiplexor using Four Ultra-Wide Band BPF, ISSN: 2395-6011 | Online ISSN: 2395-602X, doi: <https://doi.org/10.32628/IJSRST2512144>
- Adrita Das Gupta, Susmita Kanjilal, Rohit Chakraborty, Aman Sah, Shahid Parvez, Debasmita Manna, Ananya Banerjee, IoT-Based Real-Time Baggage Tracking System with Fall Detection, ISSN: 2395-6011 | Online ISSN: 2395-602X, doi: <https://doi.org/10.32628/IJSRST2512145>
- Vishal Jha, Neha Kumari Shaw, Debasmita Das, Diya Poddar, Partha Chakraborty, Ananya Banerjee, Debasmita Manna, Smart Wi-Fi-Based Buck Converter for Supply Modernization with Dynamic Voltage Regulation and IoT-Controlled Load Testing, ISSN: 2395-6011 | Online ISSN: 2395-602X, doi: <https://doi.org/10.32628/IJSRST2512148>
- Anish Dutta, Snehashis Das, Rishita Ghosh, Sutithi Patra, Aman Kumar, Somnath Dasgupta, Mayukh Bairagi, Firojuddin Sk, Lead-Free Masnbr3 Based Perovskite Solar Cells with Improved Efficiency: Device Simulation Using SCAPS 1D, International Journal of Scientific Research in Science and Technology, ISSN: 2395-6011 | Online ISSN: 2395-602X, doi : <https://doi.org/10.32628/IJSRST25121441>
- Aishani Mukharjee, Sanandita Saha, Pradipta Maiti, Multimode Digital Modulator Design. ISSN: 2395-6011 | Online ISSN: 2395-602X, doi: <https://doi.org/10.32628/IJSRST2512141>
- Debjit Kar, Summer Internship under BIT-SIPAR – 2025, Digital System Design with VHDL and Verilog , Birla Institute of Technology, Mesra

Department of Electronics and Communication Engineering

ECE DEPARTMENTAL NEWS AT A GLANCE

Student's achievements :

- Teesha Singh, Debasmita Manna, Ananya Banerjee, Arindam Sadhu, Universal Logic Based Crossed loop Trng Design in Quantum Dot Cellular Automata Technique (not yet published)
- Debraj Kahar, Saikat Mondal, Khushi Deo, Subhra Sen, Sneha Naskar, Somnath Dasgupta and Anirban Neogi*, Dual band Micro Strip Filter using Face to Face Splited dual Square Resonator with Face to Face Dual Open T stubs. (not yet published)

Department of Electronics and Communication Engineering

Departmental achievements

Faculty's achievements :

➤ Indexed Journal Published :

1. Quad Band Filter with Controllable Transmission Zeros using Vertical and Diagonal Coupling of Triple and Dual Step Impedance Resonators, Dr Anirban Neogi, Electrica, October 2024.
2. Predicting Energy Dissipation in QCA-Based Layered-T Gates Under Cell Defects and Polarisation: A Study with Machine-Learning Models, Ananya Banerjee, Debasmita Manna, Journal of Electronic Testing, August, 2024.

➤ Book(s) and Book Chapter(s) :

1. Design and Forecasting Models for Disease Management (Edited Book), Dr Arindam Sadhu, Wiley, March, 2025.
2. Design and Forecasting Models for Disease Management, Dr Arindam Sadhu, Wiley, March, 2025.
3. Design and Forecasting Models for Disease Management, Dr Arindam Sadhu, Wiley, March, 2025.
4. Microcontroller based Water Management System, Dr Anirban Neogi, Dr Arindam Sadhu, Debasmita Manna. ISBN:978-81-983133-6-2
5. OFFLINE BASED HOME AUTOMATION SYSTEM USING NodeMCU, Dr Arindam Sadhu, Dr Anirban Neogi, Ananya Banerjee. ISBN:978-81-983133-6-2
6. ADVANCED SECURITY TECHNIQUES FOR FINGERPRINT-BASED DOOR LOCKING Debasmita Manna, Ananya Banerjee, Dr. Anirban Sadhu. ISBN:978-81-983133-6-2

➤ Patent :

1. IOT Based Device for Developing Nano Formulation for Brain Tumor Detection (Granted), Dr Anirban Neogi, August 2024.
2. IOT Based Device for Developing Nano Formulation for Brain Tumor Detection (Granted), Dr Anirban Neogi, August 2024.

Department of Electronics and Communication Engineering

Departmental achievements

Other achievements of department :

➤ Editors of the Reputed Journal and Conference

1. Dr. Anirban Neogi-
 - Progress in Electromagnetic Journal (PIER)
 - International Conference on Advanced Data Analytics and Computing (ICADAC-2025)
2. Dr. Arindam Sadhu-
 - International Journal of Electrical and Computer Engineering (IJECE)
 - Journal of Scientific Research and Reports
 - Guest Editor of Special Issue or Methods Collection on “Recent Advancements in Quantum Computing” at the Journal of Visualized Experiments (SCIE Journal)
 - International Conference on Mathematical Modeling in Computational Intelligence and Gen-AI (Math-CIGAI 2025)
 - International Conference on Advanced Data Analytics and Computing (ICADAC-2025)
 - International Conference on Big Data Analytics in Bioinformatics
3. Debasmita Manna-
 - 3rd Doctoral Symposium on Human Centered Computing (Human-2025)
4. Ananya Banerjee-
 - 3rd Doctoral Symposium on Human Centered Computing (Human-2025)

Department of Electronics and Communication Engineering

Departmental achievements

Faculty's achievements :

➤ Workshop/Seminar/Conference:

Sl. No	Name of Events	Date of Conduction	No of Participants	Outcome/Resource Person Details
1	Observation Of Chandrayan 2 Launch	22nd July 2024	64	Dr. Anirban Neogi, HOD, ECE Department, DSCSITSC
2	Alumni Talk	12th August, 2024	36	Mr. Aashutosh Jaiswal, Owner and Founder of Aspire Digital Media, Alumni of ECE dept
3	A hands on Approach on C programming	16th August, 2024	48	In-house Faculties
4	Workshop On IOT	18th November 2024	45	Mr. Indranil De Sarkar Professional Trainer, Ardent Computech Pvt. Ltd
5	PRE- IDEA-JAM Event to show case Innovative Ideas	05th February 2025	45	Mr. Suwendu Mondal, Dr. Anirban Neogi, Dr. Arindam Sadhu
6	Rapid Prototyping and changes in current trend for Product development in Industry	10th February 2025	45	Mr. Sourabh Kumar, CEO, Livid Design Inc.
7	Expert Session on Nanophysics in Energy Applications	2nd, May, 2025	36	Dr. Ashok Kumar, Associate Professor, NITTR, Chandigarh
8	International Conference "Recent Advancement in The Field of Engineering and Technology	15th and 16th May 2025	47	Prof Dr Babusena Paul, (University of Johanesberg) Prof. Dr. Rana Roy, (IEST Shibpore) Prof Dr Nilanjan Dey, (Techno International)

Department of Electronics and Communication Engineering

Departmental achievements

Faculty's achievements :

➤ Workshop/Seminar/Conference:

Sl. No	Name of Events	Date of Conduction	No of Participants	Outcome/Resource Person Details
9	Innovation and Entrepreneurship	28th February, 2025	65	Dr. Abhay Jere, VCM, AICTE & CIO, MoE
10	Industry Collaborative Workshop on "VLSI Circuit Design using VHDL"	24th and 25th April, 2025	43	Dr Arindam Sadhu, Dr pradipta Maiti and Mr Saurabh Kumar, Livid Design Inc.

DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPORTS COMPLEX

540, DumDum Road, Surer Math (Near Dum Dum Jn. Station), Kolkata-700074 Website:

www.surtech.edu.in, Email: info@dsec.ac.in

Affiliated to Maulana Abul Kalam Azad University of Technology West Bengal,
WBSCTVESD and Approved by AICTE

Department of Electrical Engineering

ANNUAL REPORT 2024-25

Department of Electrical Engineering

Vision of the department

To create an ethical human resource proficient, in domains related to Electrical Engineering, for a successful career in the service of society.

Mission of the department

DM1: To impart quality education and training in Electrical Engineering with an overall background suitable for making a successful Engineer in industry and researcher higher education.

DM2: To develop life-long learning skills that allows them to be adaptive and responsive to changes in society, technology and the environment, as well as career demands.

DM3: To provide an accredited dynamic scholarly environment wherein students learn to develop communications and leadership abilities to blossom as a professional.

DM4: To ensure that every graduate is aware of the roles and responsibilities of the professional engineer in society through exposure to ethics, equity, safety and health considerations

Department of Electrical Engineering

Program Outcomes

Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Department of Electrical Engineering

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Department of Electrical Engineering

Program Educational Objective (PEO)

PEO1: Graduates will possess expertise in problem analysis, solving, designing, skills, and necessary information for a successful career in the field of Electrical Engineering.

PEO2: Graduates will accomplish practical acquaintance in modern designing tools, technologies, and Engineering software in Electrical Engineering.

PEO3: Graduates will be outstanding in communication, teamwork, and multidisciplinary approach related to engineering issues in a social context.

PEO4: Graduates will excel in a competitive environment towards leadership and life-long learning which is needed for a successful professional career.

Department of Electrical Engineering

Programme Specific Outcomes (PSOs)

PSO 1: Graduates will be able to solve real-life problems of power systems and power electronics using Power World, PSIM, and MATLAB software tools and hardware.

PSO 2: Able to provide socially acceptable technical solutions to complex electrical engineering problems with the application of modern and appropriate techniques for sustainable development.

Department of Electrical Engineering

Brief Overview of the Department

The Department of Electrical Engineering was established in the year 2011 at the very inception of Sur Institute of Technology & Sports Complex. The department started with a 4-year B.Tech course with an intake capacity of 60 seats. It has an eminent pool of highly experienced academicians and industry persons as faculty and technical staff members.

Electrical Engineering is a professional core engineering discipline that deals with the generation of electricity from different power plants, the design of power plants, the transmission of the generated power using transmission lines, the design of transmission and distribution systems, medium voltage and high voltage transmission of power, distribution of generated power to different industries, commercial customers, domestic consumers and also in agricultural areas. This discipline also deals with designing different machines for power plants, industry applications, home appliances, and many more.

Electrical engineering takes place in the public sector from municipal through to national governments, and in the private sector from IT (to handle projects related to electrical engineering and many more) through to international companies.

Started in the year 2011, the Department of Electrical Engineering prepares students to address the most compelling real-world electrical challenges, backed by sound knowledge, integrity, research, and innovation.

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With state-of-the-art infrastructure, faculty of the highest professional standards, a carefully crafted curriculum, active industry-academia collaborations, and global exposure, the Department of Electrical Engineering, DSCITSC, provides students with focused knowledge and practical skills, research, and innovation along with value-added training to prepare them for job ready.

Department of Electrical Engineering

HOD Message

Welcome to the Department of Electrical Engineering, Dr. Sudhir Chandra Sur Institute of Technology & Sports Complex, Dumdum, Kolkata. Electrical Engineering (EE) is the front runner because of its recent recognition and adoption by all industries and academia, thereby gaining the self-confidence of our students to compete successfully with all competitive disciplines. It imparts quality education in multifarious disciplines of Electrical, Electronics, Computer Science, Control Engineering, etc. along with generation, transmission, and distribution of electrical power and a set of subjects especially focusing on the performance and design of DC, AC, and Special Electric Machines. The focus of the department is to imbibe the students with potential through broad exposure to all aspects that facilitate their all-round development.

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The department has a dedicated team of faculties with a wide spectrum of specializations such as Power Electronics, Power Systems, Control systems, Industrial Drives, hybrid vehicles, computer engineering, and High Voltage for green energy. The course has a healthy blend of Power Engineering, Electronics, and Computer Engineering. The course pattern is planned to keep the students up-to-date with recent trends by organizing regular training, e-learning through MOOC, industrial visits, workshops, conferences, faculty development programs, etc. The students are provided a platform to think, express, and exhibit their skills.

We produce graduates to become future leaders in industry, academia, government, and society in India whose vision is founded upon fundamental knowledge, creative and analytical skills, local/regional perspective, and ethics. Through a good blend of coursework and projects, the department endows students with the ability to apply knowledge of science, mathematics, and engineering to work effectively in multidisciplinary teams, provide leadership and technical expertise, and practice engineering with ethical approaches and concern for society and the environment.

On the whole, we are committed to creating and erecting a professional graduate community that is vivacious and provides continuous learning. We encourage students, parents, and prospective faculty members to go through the information provided on the website and join us.

Dr. Sayantan Chakraborty

HOD & Associate Professor

Department of Electrical Engineering

Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex

Department of Electrical Engineering

EE DEPARTMENTAL NEWS AT A GLANCE

Departmental Events :

- 1. MoU signed with "Cybermotion Technologies Pvt. Ltd." on 05th August, 2024**
- 2. INDUSTRIAL VISIT at Electro Trans Industries Pvt Ltd, Konnagar, Hooghly on 18th November, 2024**
- 3. INDUSTRIAL VISIT at Ardent Computech Pvt Ltd, SDF Building, Salt Lake, Kolkata on 22th November, 2024**
- 4. One Day Entrepreneurship Awareness Programme (EAP) in association with EDII under MSME on 12th February, 2025**
- 5. Industrial Visit to WBSEDCL 33kV/11kV Substations, Newtown Action Area 1B on 25th February, 2025**
- 6. Industrial Visit to Binay Udyog Private Limited (BPL), Jagacha, Howrah – 711302 on 19th March ,2025**
- 7. Project Competition "Upcycling Brilliance" on 03rd April, 2025**
- 8. MoU signed with " Dynamic Engineering" on 19th May, 2025**
- 9. One-Day Workshop on Industrial Electrical Practices by Mr. Salil Kumar Biswas in association with Dynamic Engineering on 19th May, 2025**

Department of Electrical Engineering

ECE DEPARTMENTAL NEWS AT A GLANCE

Student's achievements :

Roshan Bose, Rejaul Ali, Udisha Paik, Tanushree Mondal, and Loveleena Paul (students, EE), under the guidance and co-authorship of Mr. Suwendu Mondal, Dr. Sayantan Chakraborty, Dr. Amitava Halder, Dr. Rumrum Banerjee, and Mr. Prathita Roy, presented their paper titled "Enhancing Short-Term Electricity Demand Forecasting with ARIMA-Based Machine Learning Technique" at the International Conference on Recent Developments and Applications in Materials Science and Engineering (RDAMSE 2025), held on 30th–31st January 2025 at Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex (DSCSITSC). The paper was published in Volume 1, Page 82 of the conference proceedings.

Sneha Bag, Gargi Mondal, Choden Tamang, Air Quality Monitoring and Control System Using ESP32 Microcontroller International Conference on Recent Advancement in The Field of Engineering and Technology, (RAFET-2025) Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex 15.05.25-16.05.25

Pritish Nandy, Roushan Kumar, Farhanuddin Mondal, Navigation of Blind People Using Smart Cap, Smart Shoe, and Mobile Charging System on Recent Advancement in The Field of Engineering and Technology, (RAFET-2025) Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex 15.05.25-16.05.25

Roshan Bose, An Innovative Proposal for Enhanced Utilization of Atmospheric Electricity via Electrostatic (Corona) Motors on Recent Advancement in The Field of Engineering and Technology, (RAFET-2025) Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex 15.05.25-16.05.25

Md Rijvi Ansari, Sandip Majumdar, Soumya Chakaborty, Quantum Communication and Quantum Cryptography: A New Era of Secure Information Transfer on Recent Advancement in The Field of Engineering and Technology, (RAFET-2025) Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex 15.05.25-16.05.25

Roshan Bose, Simulation-Based Design and Performance Analysis of Electrostatic Corona Motors for Atmospheric Electricity Harvesting on Recent Advancement in The Field of Engineering and Technology, (RAFET-2025) Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex 15.05.25-16.05.25

Department of Electrical Engineering

ECE DEPARTMENTAL NEWS AT A GLANCE

Student's achievements :

Arindam Ghosh, Tanmoy Ghosh, Prantik Indu, Subrata Ghosh, Smart Surveillance System on Recent Advancement in The Field of Engineering and Technology, (RAFET-2025) Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex 15.05.25-16.05.25

Jeet Sarkar, Buddhadeb Swarnakar, Mohini Mandal, Jaydip Guha, Improving Battery Efficiency in Electric Vehicles through Advanced Technologies and Smart Management on Recent Advancement in The Field of Engineering and Technology, (RAFET-2025) Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex 15.05.25-16.05.25

Tohidur Rahaman, Sandya Gurung, Subhasish Mahato, Surajit kar, Soumi Dey, Enhancing Water Quality Prediction in West Bengal Using PSANN on Recent Advancement in The Field of Engineering and Technology, (RAFET-2025) Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex 15.05.25-16.05.25

Souvik Das, Amartya Chatterjee, Subham Pal, Raj Biswas, Iot Based Smart Irrigation System on Recent Advancement in The Field of Engineering and Technology, (RAFET-2025) Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex 15.05.25-16.05.25

Sayan Chakraborty, Debasmita Biswas, Nilanjana Roy, Amit Kulsi, Drone Technology for Detection and Solution for Pest Control in Agriculture – A Review on Recent Advancement in The Field of Engineering and Technology, (RAFET-2025) Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex 15.05.25-16.05.25

Susanto Mondal, Rajat Bhowmik, Nahin Mudi, Subha Koley, Rajiv Kumar, Tonmoy Bhui, Laser Home Protection System on Recent Advancement in The Field of Engineering and Technology, (RAFET-2025) Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex 15.05.25-16.05.25

Sneha Bag, Tanmay Ghosh (Team Surge) got 3rd position in “CodeSummit@50” organized by Govt. of Sikkim & Sikkim Manipal Institute of Technology from 21.05.25 to 24.05.25

Md Rijvi Ansari, Tanmoy Ghosh, Sandya Gurung, Arindam Ghosh (Team Suretrical) got 2nd position in “Upcycling Brilliance” organized by Department of Electrical Engineering, Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex on 03.04.2025

Department of Electrical Engineering

Departmental achievements

Faculty's achievements :

➤ Workshop/Seminar/Conference:

Sl. No	Name of Events	Date of Conduction	No of Participants	Outcome/Resource Person Details
1	Seminar on "One Day Entrepreneurship Awareness Programme (EAP)"	12th February, 2025	80	1.Shri Narendra Nath Mukherjee, Project Executive, The Entrepreneurship Development Institute of India (EDII) 2.Shri Avijit Kumar Roy, Faculty, EDII 3.Shri Avik Ranjan Das, Faculty, EDII
2	One-Day Workshop on Industrial Electrical Practices	19h May, 2025	17	Mr. Salil Kumar Biswas, Director, Dynamic Engineering

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Department of Mechanical Engineering

ANNUAL REPORT 2024-25

Department of Mechanical Engineering

Vision of the department

To become a top teaching-cum-research Department in Mechanical Engineering in the country through an exemplary system that leads to entrepreneurship, innovation, values and quality.

Mission of the department

M1: To impart total quality education through effective hi-tech teaching-learning techniques and department-industries collaboration.

M2: To mold the young dynamic potential minds to emerge as full-fledged future professionals so as to achieve top ten ranking status in the national level.

M3: To achieve international standards to fulfill the Government's "Make In India" industrial policy through innovation and research.

Department of Mechanical Engineering

Program Outcomes

- * **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- * **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- * **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- * **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- * **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- * **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- * **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

Department of Mechanical Engineering

- * **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- * **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- * **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- * **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- * **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Educational Objective (PEO)

PEO1: To enhance the knowledge of the under graduates with fundamental Science of Engineering & Technical abilities.

PEO2: To develop high level of technical competency combined with research and problem-solving skills to generate innovative solutions in Mechanical Engineering and/or related interdisciplinary areas.

PEO3: To expand capability of methodological approach for taking decision and designing.

PEO4: To promote awareness towards socio-economic and energy related challenges and enhance professional as well as communication skill and perform as a team.

Programme Specific Outcomes (PSOs)

PSO1: Graduates will be able to apply necessary mathematical and advanced software tools for design, analysis and fabrication of components used in the field of mechanical engineering.

PSO2: Students will be able to gain knowledge about engines, machineries and develop critical skills to analyze the cause and effect of complicated mechanical processes.

PSO3: Graduates will be able to gain team spirit for working in industrial projects as well as pursuing higher studies to contribute in mechanical engineering research and development.

Department of Mechanical Engineering

Brief Overview of the Department

The Department of Mechanical Engineering was established in the year 2009 at the very inception of Dr. Sudhir Chandra Sur Institute of Technology and sports complex (formerly Dr. Sudhir Chandra Sur Degree Engineering College.) The department started with a 4 years B.Tech course (Capacity 30 Students) and later on, Master of Technology (Capacity 18 Students) came into being in 2012. Mechanical engineering is one of the most sought-after core streams of engineering disciplines with multidisciplinary fields of work. The department is flourished with excellent laboratory facilities with a wide range of learning facilities, high quality teaching and laboratory staff. The Department stresses upon all round development of the students by personal interaction between the staff and students beyond stipulated working hours and available for guidance even after they have passed out of the college. The Department aims at producing employable engineers who are capable of contributing meaningfully to the society.

Department of Mechanical Engineering

HOD Message

As we come to the end of another academic year, it's a privilege to reflect on the accomplishments, challenges, and progress made by our Mechanical Engineering department throughout 2024-25. Our journey has been marked by resilience, innovation, and a commitment to excellence in education, research, and service. I extend my deepest gratitude to each member of our faculty for their unwavering dedication and contributions. Our students have once again demonstrated exceptional talent, creativity, and dedication to their studies and extracurricular activities. Whether it's participating in competitions, conducting groundbreaking research, or engaging in community outreach, our students continue to make us proud. The year 2024-25 has been significant for our department in terms of research achievements. We have secured grants for several groundbreaking projects, published papers in prestigious journals, and collaborated with industry partners to address real-world challenges. These accomplishments are a testament to the caliber of research conducted within our department. Our commitment to providing a high-quality education has never wavered, and we have embraced technology to ensure continuity in our academic programs. Looking ahead, we are excited about the opportunities that the future holds for our department. We will continue to nurture a culture of innovation, collaboration, and excellence, striving to make meaningful contributions to our field and society at large. I would like to express my heartfelt thanks to all our stakeholders, including our alumni, industry partners, and supporters, for their continued support and encouragement. Together, we will continue to elevate the stature of our department and make a positive impact on the world. As we conclude another successful year, let us celebrate our achievements and rededicate ourselves to the pursuit of excellence in Mechanical Engineering.

Dr. Arpita Chatterjee

HOD, Department of Mechanical Engineering

Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex
ANNUAL REPORT 2024-25

Department of Mechanical Engineering

MECHANICAL DEPARTMENTAL NEWS AT A GLANCE

Department of Mechanical Engineering organized the Academia & Industrial Summit 2024 on 8th November 2024.

Department of Mechanical Engineering organized an industrial visit at Texmaco Rail & Engineering Ltd., Agarpara, West Bengal on 14th February 2025.

The department organised an Industrial visit at Binay Udyog Pvt. Ltd., Howrah, West Bengal on 19th March 2025.

Department of Mechanical Engineering in collaboration with Electrical Engineering organized an inter-college Project Competition “Upcycling Brilliance” on 3rd April 2025.

Department of Mechanical Engineering in collaboration with Civil Engineering and Automobile Engineering organized an international Faculty Development Program on the theme “Bridging Research & Funding—Unlocking Grants for Industry & Academia” from 7th to 11th April 2025.

Department of Mechanical Engineering organized a One-Day Seminar on “Additive Manufacturing” for the 2nd year and final-year students of Diploma in Mechanical Engineering at Contai (Govt.) Polytechnic College, Kanthi, Dist. - Purba Medinipur on 11th April 2025.

Prof.(Dr.) Arpita chaterjee received JIS academic puraskar and Innovation award for her excellent work in research field..

Prof. Geetika Kumari Salwan reviewed one International Journal of Aerospace Engineering..

Six Students of M.tech final year of the Department of Mechanical Engineering presented their research paper on International Conference organized by Sur-Tech on 15-16th May 2025.

Department of Mechanical Engineering

MECHANICAL DEPARTMENTAL NEWS AT A GLANCE



Academia and Industrial Summit, 2024

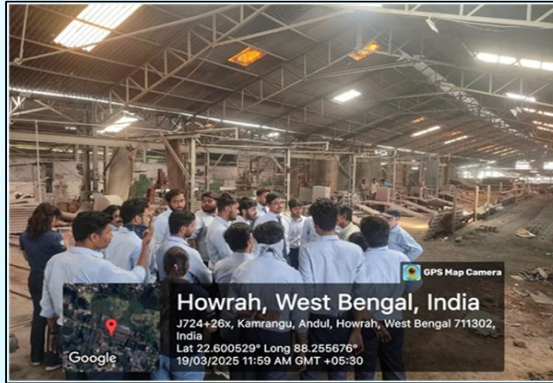
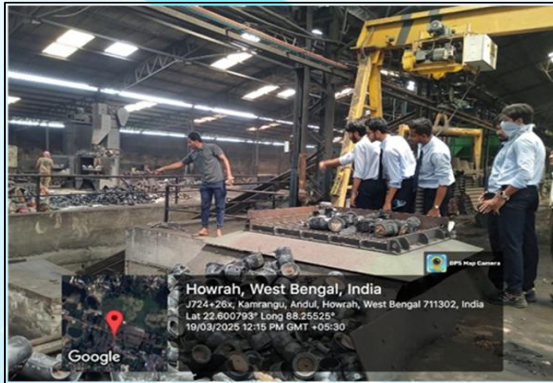


Industrial Visit at Texmaco Rail & Engineering Ltd.

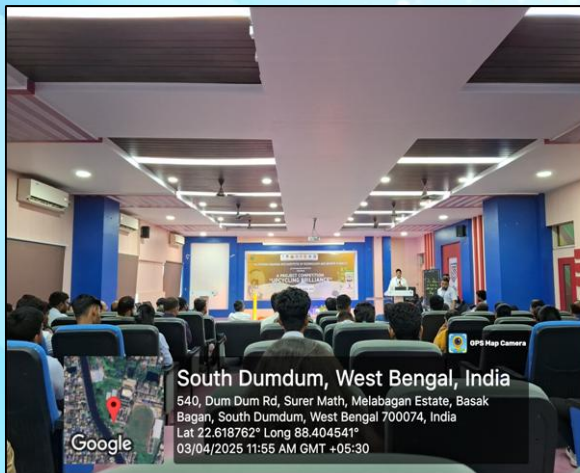
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Department of Mechanical Engineering

MECHANICAL DEPARTMENTAL NEWS AT A GLANCE



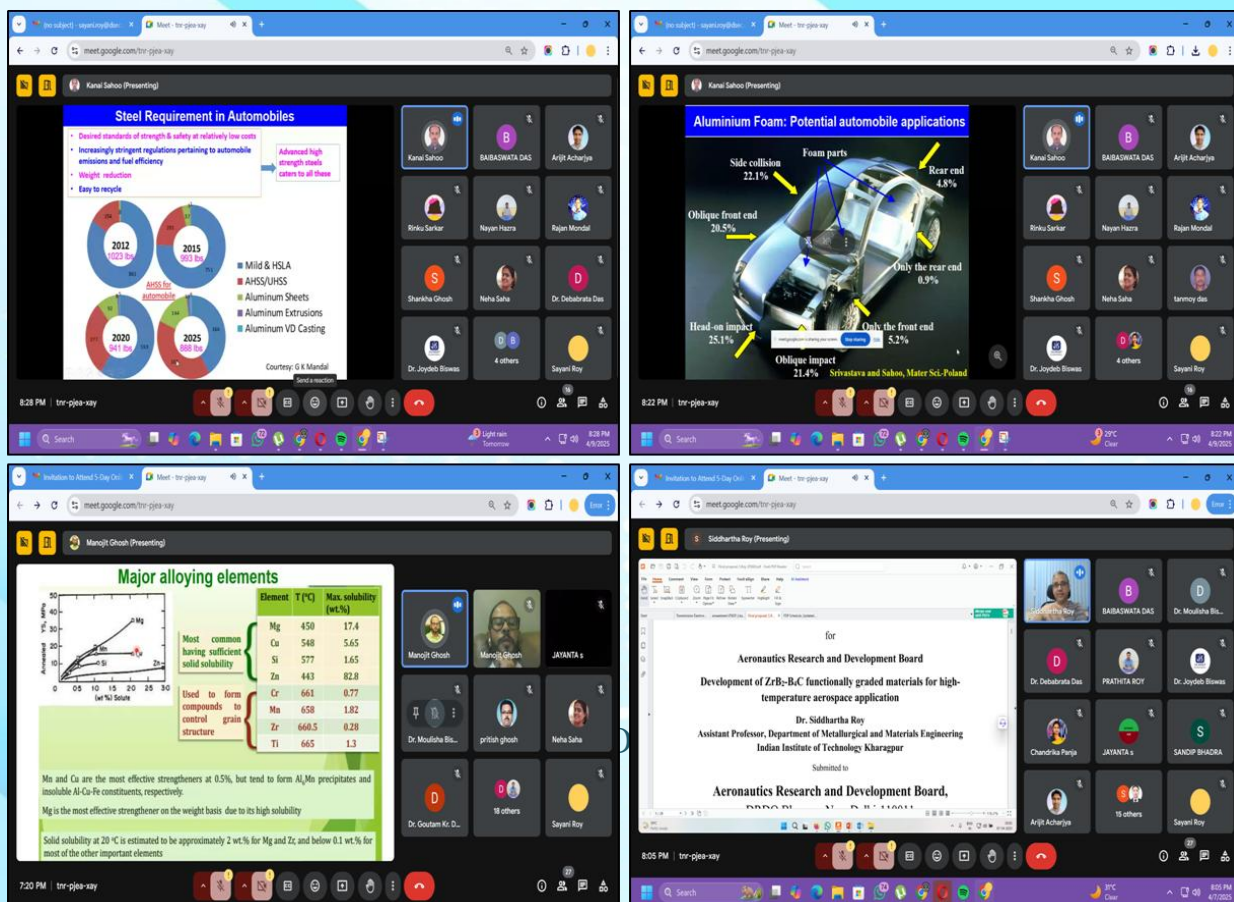
Industrial visit at Binay Udyog Pvt. Ltd



Project competition "Upcycling Brilliance"

Department of Mechanical Engineering

MECHANICAL DEPARTMENTAL NEWS AT A GLANCE



Glimpses of International Faculty Development Program



Glimpses of Seminar at Contai (Govt.) Polytechnic College, Kanthi

Department of Mechanical Engineering

Departmental achievements

A Memorandum of Understanding (MOU) has been signed between the Department of ME and M/s Imagiminds Cadd and Engineering Solutions, Kolkata on 19th March, 2025.

Faculty Achievements :

Dr. Arpita Chatterjee published “Investigating phase and magnetic properties in Co-2 wt.% MWCNT nano-composites prepared by mechanical alloying” Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering (SCI) <https://doi.org/10.1177/09544089241279156>.

Geetika Kumari Salwan published “Experimental studies on microscopic and mechanical properties of Nimonic 90 superalloy synthesized using Powder Metallurgy” Journal of materials engineering and performance (SCI). <https://doi.org/10.1007/s11665-024-10093-6>.

Dr. Arpita Chatterjee completed a five day ATAL-FDP (online) on “Advances in Material Science for sustainable Development and Industrial Applications” from 10th to 15th February 2025.

Dr. Debabrata Das completed a five day ATAL-FDP (online) on “Advances in Material Science for sustainable Development and Industrial Applications” from 10th to 15th February 2025.

Mrs. Geetika Kumari Salwan completed a five day ATAL-FDP (online) on “Advances in Material Science for sustainable Development and Industrial Applications” from 10th to 15th February 2025.

Mr. Subhasish Halder completed a five day ATAL-FDP (online) on “Advances in Material Science for sustainable Development and Industrial Applications” from 10th to 15th February 2025.

Dr. Debabrata Das completed a five day ATAL-FDP (online) on “Industry 4.0 and Smart Manufacturing: Transforming Traditional Practices” from 3rd to 8th February 2025.

Mr. Subhasish Halder completed a five day ATAL-FDP (online) on “Industry 4.0 and Smart Manufacturing: Transforming Traditional Practices” from 3rd to 8th February 2025.

Mrs. Geetika Kumari Salwan completed a five day ATAL-FDP (online) on “Industry 4.0 and Smart Manufacturing: Transforming Traditional Practices” from 3rd to 8th February 2025.

Dr. Arpita Chatterjee completed a five day FDP on “Building Skills for Advanced Cognitive Assessment” from 10th to 15th February 2025.

Department of Mechanical Engineering

Departmental achievements

Faculty Achievements :

Prof.(Dr.) Arpita chaterjee received JIS academic puraskar and Innovation award for her excellent work in research field.

Prof. Geetika Kumari Salwan reviewed one International Journal of Aerospace Engineering.

Dr. Debabrata Das delivered a Lecture as Invited Speaker on a One-Day Seminar on “Additive Manufacturing” for the 2nd year and final-year students of Diploma in Mechanical Engineering at Contai (Govt.) Polytechnic College, Kanthi, Dist. - Purba Medinipur on 11th April 2025

Students Achievement :

Sreetama Paul, M.Tech 2nd Year presented & published a research paper “Corrosion Behaviour of Hastelloy C 276 for Industrial Applications” in the international conference organized by Sur-Tech on “Recent advancement in the field of Engineering and Technology” dated 15-16th May 2025. Received best paper award.

Sayan Samanta, M.Tech 2nd Year presented & published a research paper “ Current status and advancement in materials used for Gas Turbine Engines” in IPRoMM 2024 19th -21st December 2024, Organized by NIT Jamshedpur.

Arnab Paul, M.Tech 2nd Year presented & published a research paper “A Comparative Study of Microstructural Alterations and Mechanical Performance of IN718 Welds: Insights from Diverse Welding Processes” on International conference “Recent advancement in the field of Engineering and Technology” dated 15-16 May 2025

Koushik Sarkar, M.Tech 2nd Year presented & published a research paper “A Comprehensive Review of Traditional Welding and Laser Beam Welding Techniques for Inconel 800” on International conference “Recent advancement in the field of Engineering and Technology” dated 15-16 May 2025.

Sourav Paul, 2nd Year M.Tech presented & published a research paper “A Critical Assessment of Inconel 625 Laser Welding for Technological Advancements” on International conference “Recent advancement in the field of Engineering and Technology” dated 15-16 May 2025.

Raihan SK., B.Tech 2nd Year presented & published a research paper “A Critical Assessment of Inconel 625 Laser Welding for Technological Advancements Advanced Powertrain Technologies” on International conference “ Recent advancement in the field of Engineering and Technology” dated 15-16 May 2025.

DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPORTS COMPLEX

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WBSCTVESD and Approved by AICTE

Research & Publications 2024-25

Patent filed

Sl. No.	Faculty Name	Department	Title of Patent	Patent Application Number	Patent Status (Filed, Published, Granted)
1	Baibaswata Das	CE	Recycling of coal dust and fly ash as replacement of fine aggregate and cement for manufacturing of sustainable construction material	202431086955 A	Published
2	Sourav Kumar Singha	CE	REAL-TIME SOLAR RADIATION MONITORING SYSTEM USING DEEP LEARNING AND IMAGE PROCESSING	2.02441E+11	Published
3	Souvik Chakraborty	CE	AI-DRIVEN GEAR PROFILE ERROR DETECTION SYSTEM FOR PRECISION MANUFACTURING	2.02441E+11	Published
			DEVELOPMENT OF SELF-HEALING CONCRETE USING MICROBIAL AND CHEMICAL ADMIXTURES FOR ENHANCED DURABILITY	2.02541E+11	Published
			Wearable Device For Real Time Monitoring Of Vital Signs Using AI and Optical Sensors	2.02541E+11	Published
6	Chandrima Sinha Roy	CSE	PERSONALISED HEALTHCARE: MACHINE LEARNING-DRIVEN WEARABLE SENSOR MONITORING AND CLASSIFICATION	2.02431E+11	Published
7	Chandrima Sinha Roy	CSE	ROBOTIC MEDICINE PICKING AND DELIVERING MACHINE	6412032	Granted
8	Dr Dipankar Das	BSH	AI AND BLOCKCHAIN-BASED CYBERSECURITY SYSTEM FOR REALTIME THREAT DETECTION AND MITIGATION IN IOT NETWORKS	2.02441E+11	Published
9	Mousumi Ojha	CSE	ROBOTIC MEDICINE PICKING AND DELIVERING MACHINE	6412032	Granted
10	Mousumi Ojha	CSE	AI BASED ELDERLY INDIVIDUAL FALL DETECTION DEVICE	6413624	Granted
11	Somnath Dasgupta	ECE	IoT BASED SMART ROBOT FOR AIR CONDITIONER DUCT CLEANING	Design No-438894-001	Published
12	Prathita Roy	EE	Air magnetix : Emphasizes the Flow of Energy through the Air	202531052867 A	Published
13	Prathita Roy	EE	Magni-Air: Energizing Power Empowering Tomorrow	202531052838 A	Published
14	Prathita Roy	EE	TransAirgy : A New Era of Wireless Energy	202531052836 A	Published
15	Prathita Roy	EE	VoltNosticsAI : Predictive Battery Health Monitoring with AI Precision	202531052844 A	Published
16	Prathita Roy	EE	BioThermaCell : Adaptive Cellular Cooling for Smarter BMS Performances	202531058253 A	Published
17	Prathita Roy	EE	CellSurvivorX: Redundant Switching BMS with Self-Healing Power Core Logic	202531058255 A	Published
18	Prathita Roy	EE	SolverraGrid : Adaptive BMS for Smart Solar Microgrids in Rural Frontiers	202531055679 A	Published
19	Prathita Roy	EE	SwarmoCharge: Intelligent Battery Sync & Power Control for Multi-Drone Grids	202531055680 A	Published
20	Dr.Rumrum Banerjee	EE	Air magnetix : Emphasizes the Flow of Energy through the Air	202531052867 A	Published
21	Dr.Rumrum Banerjee	EE	Magni-Air: Energizing Power Empowering Tomorrow	202531052838 A	Published

Patent filed

Sl. No.	Faculty Name	Department	Title of Patent	Patent Application Number	Patent Status (Filed, Published, Granted)
22	Dr.Rumrum Banerjee	EE	TransAirgy : A New Era of Wireless Energy	202531052836 A	Published
23	Dr.Rumrum Banerjee	EE	VoltNosticsAI : Predictive Battery Health Monitoring with AI Precision	202531052844 A	Published
24	Dr.Rumrum Banerjee	EE	BioThermaCell : Adaptive Cellular Cooling for Smarter BMS Performances	202531058253 A	Published
25	Dr.Rumrum Banerjee	EE	CellSurvivorX: Redundant Switching BMS with Self-Healing Power Core Logic	202531058255 A	Published
26	Dr.Rumrum Banerjee	EE	SolverraGrid : Adaptive BMS for Smart Solar Microgrids in Rural Frontiers	202531055679 A	Published
27	Dr.Rumrum Banerjee	EE	SwarmoCharge: Intelligent Battery Sync & Power Control for Multi-Drone Grids	202531055680 A	Published
28	Dr.Sayantana Chakraborty	EE	Air magnetix : Emphasizes the Flow of Energy through the Air	202531052867 A	Published
29	Dr.Sayantana Chakraborty	EE	Magni-Air: Energizing Power Empowering Tomorrow	202531052838 A	Published
30	Dr.Sayantana Chakraborty	EE	TransAirgy : A New Era of Wireless Energy	202531052836 A	Published
31	Dr.Sayantana Chakraborty	EE	VoltNosticsAI : Predictive Battery Health Monitoring with AI Precision	202531052844 A	Published
32	Dr.Sayantana Chakraborty	EE	BioThermaCell : Adaptive Cellular Cooling for Smarter BMS Performances	202531058253 A	Published
33	Dr.Sayantana Chakraborty	EE	CellSurvivorX: Redundant Switching BMS with Self-Healing Power Core Logic	202531058255 A	Published
34	Dr.Sayantana Chakraborty	EE	SolverraGrid : Adaptive BMS for Smart Solar Microgrids in Rural Frontiers	202531055679 A	Published
35	Dr.Sayantana Chakraborty	EE	SwarmoCharge: Intelligent Battery Sync & Power Control for Multi-Drone Grids	202531055680 A	Published
36	Suvendu Mondal	EE	Air magnetix : Emphasizes the Flow of Energy through the Air	202531052867 A	Published
37	Suvendu Mondal	EE	Magni-Air: Energizing Power Empowering Tomorrow	202531052838 A	Published
38	Suvendu Mondal	EE	TransAirgy : A New Era of Wireless Energy	202531052836 A	Published
39	Suvendu Mondal	EE	VoltNosticsAI : Predictive Battery Health Monitoring with AI Precision	202531052844 A	Published
40	Suvendu Mondal	EE	BioThermaCell : Adaptive Cellular Cooling for Smarter BMS Performances	202531058253 A	Published
41	Suvendu Mondal	EE	CellSurvivorX: Redundant Switching BMS with Self-Healing Power Core Logic	202531058255 A	Published
42	Suvendu Mondal	EE	SolverraGrid : Adaptive BMS for Smart Solar Microgrids in Rural Frontiers	202531055679 A	Published
43	Suvendu Mondal	EE	SwarmoCharge: Intelligent Battery Sync & Power Control for Multi-Drone Grids	202531055680 A	Published

Publications

Sl. No.	All Student Name(s)	All Departments	Paper Title	Collaborators/Institutions Involved	Name of the Journal/Conference	Year & date	Type of Publication (Journal / Conference / Book Chapter / Poster Presentation / etc.)	Volume, Issue, and Page Numbers	Indexing Status (e.g., Scopus, SCI, UGC-CARE, etc.)	Support from Institute / R&D Cell (Yes/No)
1	Roshan Bose, Rejaul Ali, Udisha Paik, Tanushree Mondal, Loveleena Paul	EE	Enhancing Short-Term Electricity Demand Forecasting with Arima-Based Machine Learning Technique	DSCSITSC	RDAMSE	30/01/2025-31/01/2025	Conference	VOL-1, Page-82	UGC Care	YES
2	Sneha Bag, Gargi Mondal, Choden Tamang	EE	Air Quality Monitoring and Control System Using ESP32 Microcontroller.	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
3	Pritish Nandy, Roushan Kumar, Farhanuddin Mondal	EE	Navigation of Blind People Using Smart Cap, Smart Shoe, and Mobile Charging System.	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
4	Roshan Bose	EE	An Innovative Proposal for Enhanced Utilization of Atmospheric Electricity via Electrostatic (Corona) Motors	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
5	Md Rijvi Ansari, Sandip Majumdar, Soumya Chakaborty	EE	QUANTUM COMMUNICATION AND QUANTAM CRYPTOGRAPHY: A new era of secure information transfer	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
6	Roshan Bose	EE	Simulation-Based Design and Performance Analysis of Electrostatic Corona Motors for Atmospheric Electricity Harvesting	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
7	Arindam Ghosh, Tanmoy Ghosh, Prantik Indu, Subrata Ghosh	EE	Smart Surveillance System	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
8	Jeet Sarkar, Buddhadeb Swarnakar, Mohini Mandal, Jaydip Guha	EE	Improving Battery Efficiency in Electric Vehicles Through Advanced Technologies and Smart Management	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
9	Sandya Gurung, Subhasish Mahato, Tohidur Rahaman, Surajitkar, Soumi Dey	EE	Enhancing Water Quality Prediction in West Bengal Using PS-ANN	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
10	Souvik Das, Amartya Chatterjee, Subham Pal, Raj Biswas	EE	IoT Based Smart Irrigation System	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
11	Jahid Pathan, Suvadeep Shil, Mohammad Junaid Mallick, Amit Kumar Dutta	EE	Drone Technology for Detection and Solution for Pest Control in Agriculture	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
12	Sayan Chakraborty, Debasmita Biswas, Nilanjana Roy, Amit Kulsi	EE	Mid-Air Wireless Power Transfer for Drones Using Resonant inductive coupling	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
13	Rejaul Ali, Udisha Paik, Loveleena Paul, Tanushree Mondal	EE	Smart Transformer Load Balance	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
14	Susanto Mondal, Rajat Bhowmik, Nahin Mudi, Subha Koley, Rajiv Kumar, Tonmoy Bhui	EE	Laser Home Protection System	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES
15	Anushwa Bhattacharya, Bhavini Lakhotia, Krishna Khare, Md Abid Khan, Shahir Hilal	CSE	ZEROSPHERE: SIMPLIFYING FINANCIAL MANAGEMENT	DSCSITSC	RAFET, 2026	15/05/2025-16/05/2026	Conference		UGC Care	YES
16	Sayantan Chowdhury, Swati Jha, Rounak Singh, Surya Ghosh, Tamashree Sarkar,	CSE	MediGeek – A Social Media App for Medical Professionals	DSCSITSC	RAFET, 2027	15/05/2025-16/05/2027	Conference		UGC Care	YES
17	Binit Kumar, Ankit Kumar Singh, Md Mustaqeem Ansari, Mankeshwar Prasad Singh, Bhanu Ray	CSE	Easy Car Rental Management System	DSCSITSC	RAFET, 2028	15/05/2025-16/05/2028	Conference		UGC Care	YES
18	Debjani De, Quazi Ibtida Islam, Asmita Dutta, Megha Dutta, Sarfaraz Hassan	CSE	Design and Implementation of a Smart Web-Based Car Rental Management System Using MERN Stack	DSCSITSC	RAFET, 2025	15/05/2025-16/05/2025	Conference		UGC Care	YES

Publications

Sl. No.	All Student Name(s)	All Departments	Paper Title	Collaborators/Institutions Involved	Name of the Journal/Conference	Year & date	Type of Publication / Conference / Book Chapter / Poster Presentation / etc.)	Volume, Issue, and Page Numbers	Indexing Status (e.g., Scopus, SCI, UGC-CARE, etc.)	Support from Institute / R&D Cell (Yes/No)
19	Susmita Saha, Deepak Kumar Roy	CSE	Career.AI : An AI-Based Approach to End –to-End Professional Coaching for the Modern Workforce	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2025	Conference		UGC Care	YES
20	Sayantana Kar, Soumajit Majumder, Soumik Chakraborty, Srijan Chowdhury, Susmita Partha	CSE	REAL-ESTATE PRICE PREDICTION USING OF MACHINE LEARNING	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2025	Conference		UGC Care	YES
21	Rajkumar Pradhan, Sreshtha Ghosh, Raihan Sk, Ranik Dhara, Souvik Samanta	ME	Advanced Powertrain Technologies	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2025	Conference		UGC Care	YES
22	Koushik Sarkar, Arnab Paul, Sourav Paul	ME	A Critical Assessment of Inconel 625 Laser Welding For Technological Advancements A Comprehensive Review of Traditional Welding and Laser Beam Welding Techniques for Inconel 800	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2025	Conference		UGC Care	YES
23	Sourav Paul, Koushik Sarkar, Arnab Paul	ME	A Critical Assessment of Inconel 625 Laser Welding For Technological Advancements	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2025	Conference		UGC Care	YES
24	Arnab Paul, Sourav Paul, Koushik Sarkar	ME	A Comparative Study of Microstructural Alterations and Mechanical Performance of IN718 Welds : Insights from Diverse Welding Processes	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2025	Conference		UGC Care	YES
25	Sourav Maji	ME	Review on Revolution of Green Steel Sustainable Practices for the Future of Manufacturing Industry	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2025	Conference		UGC Care	YES
26	Sreetama Paul, Sayan Samanta,	ME	Corrosion Behaviour of Hastelloy C276 for Industrial Applications	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2025	Conference		UGC Care	YES
27	Sudeep Banerjee, Somdip Ghosh, Dipankar Ram	AUE	Alcohol Additives in Biodiesel : Type, Properties, And Their Effects: Review	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2026	Conference	Volume 12 Issue 14	UGC Care	YES
28	Swakshar Mitra	AUE	Biodiesel Blends and Engine Performance Analysis Using Python Programming: A Review	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2026	Conference	Volume 12 Issue 14	UGC Care	YES
29	Md Naseer Hossain	AUE	Production of Biofuels from Waste Food and Vegetables for Engine Applications - A Review	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2026	Conference	Volume 12 Issue 14	UGC Care	YES
30	Tuhin Chakraborty	AUE	Review of Biofuel from Waste Cooking Oil for Compression Ignition Engines	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2026	Conference	Volume 12 Issue 14	UGC Care	YES

Publications

Sl. No.	All Student Name(s)	All Departments	Paper Title	Collaborators/Institutions Involved	Name of the Journal/Conference	Year & date	Type of Publication (Journal / Conference / Book Chapter / Poster Presentation / etc.)	Volume, Issue, and Page Numbers	Indexing Status (e.g., Scopus, SCI, UGC-CARE, etc.)	Support from Institute / R&D Cell (Yes/No)
31	Sayan Das Debjit Ghosh	AUE	Review on a Solar Powered Vehicle	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2026	Conference	Volume 12 Issue 14	UGC Care	YES
32	Adrita Das Gupta, Susmita Kanjilal, Rohit Chakraborty, Aman Sah, Shahid Parvez	ECE	IoT-Based Real-Time Baggage Tracking System with Fall Detection	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2026	Conference	International Journal of Scientific Research in Science and Technology, Print ISSN: 2395-6011 Online ISSN: 2395-602X, Volume 12, Issue 14, May- June-2025, https://doi.org/10.32628/IJSRS T2512145	UGC Care	YES
33	Aishani Mukharjee, Sanandita Saha	ECE	Multimode Digital Modulator Design	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2026	Conference	https://doi.org/10.32628/IJSRS T2512141	UGC Care	YES
34	Debraj Kahar, Saikat Mondal, Khushi Deo, Subhra Sen, Sneha Naskar	ECE	Micro Strip Multiplexor Using Four Ultra-Wide Band BPF	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2026	Conference	https://doi.org/10.32628/IJSRS T2512144	UGC Care	YES
35	Vishal Jha, Neha Kumari Shaw, Debasmita Das, Diya Poddar, Partha Chakraborty	ECE	Smart Wi-Fi-Based Buck Converter for Supply Modernization with Dynamic Voltage Regulation and IoT- Controlled Load Testing	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2026	Conference	https://doi.org/10.32628/IJSRS T2512148	UGC Care	YES
36	Anish Dutta, Snehashis Das, Rishita Ghosh, Sutithi Patra, Aman Kumar	ECE	Lead-Free MASnBr ₃ Based Perovskite Solar Cells with Improved Efficiency: Device Simulation using SCAPS 1D	DSCSITSC	RAFET, 2025	15/05/2025 - 16/05/2026	Conference	doi: https://doi.org/10.32628/IJSRST 25121441	UGC Care	YES

Publications

Sl. No.	Faculty Name	Department	Paper Title	Collaborator s/Institutions Involved	Journal Name	Year	Publication Date	Volume, Issue, and Page Numbers	Indexing (SCI, Scopus, UGC, etc.)	DOI	Type of Paper (Original Research, Review, Short Communication, etc.)
1	Souvik Chakraborty, Baibaswata Das, Sourav Kumar Singha, Krishnendu Kundu, Souradeep Roy	Department of CE	"Coastal Water Purification Strategies for Agricultural Needs at South 24 Parganas, West Bengal (WB)"	NA	Journal of Xidian University	2024	30.08.2024		Scopus	https://doi.org/10.5281/Zenodo.13605501	Original Research
2	Dr Anirban Neogi	ECE	Quad Band Filter with Controllable Transmission Zeros using Vertical and Diagonal Coupling of Triple and Dual Step Impedance Resonators	NA	ELECTRICA	2024	01-10-2024		Scopus, SCI, WOS	10.5152/electrica.2024.22218	Original Research
3	Bapin Mondal	BSH	Unraveling Chaos, Transition and Dynamical Complexities in a Generalized Predator–Prey Model with Cooperation-Induced Fear and Gestation Delay	NA	International Journal of Bifurcation and Chaos	2024	07-31-2024	Vol. 34, No. 10, 2450119 (2024)	Scopus, SCI, WOS	https://doi.org/10.1142/S0218127424501190	Original Research
4	Bapin Mondal	BSH	Exploring bistable plankton dynamics: stochastic model analysis by SSF techniques	NA	The European Physical Journal Plus	2024	10-23-2024	139, 921 (2024)	Scopus, SCI, WOS	https://doi.org/10.1140/epjp/s13360-024-05606-0	Original Research
5	Bapin Mondal	BSH	Seasonal wind-induced dynamics in a tri-trophic food chain: exploring bifurcation	NA	The European Physical Journal Plus	2024	12-20-2024	139, 1115 (2024).	Scopus, SCI, WOS	https://doi.org/10.1140/epjp/s13360-024-05919-0	Original Research
6	Bapin Mondal	BSH	Degn–Harrison map: Dynamical and network behaviours with applications in image encryption	NA	Chaos, Solitons & Fractals	2025	01-10-2025	192, (115987)	Scopus, SCI, WOS	https://doi.org/10.1016/j.chaos.2024.115987	Original Research
7	Bapin Mondal	BSH	Unraveling dynamics of bursting, transient, and tipping behavior in toxic plankton-fish system with fear and zooplankton refuge	NA	Journal of Computational Science	2025	01-11-2025	2025, 102527	Scopus, SCI, WOS	https://doi.org/10.1016/j.jocs.2025.102527	Original Research
8	ANANYA BANERJEE, DEBASMITA MANNA	ECE	Predicting Energy Dissipation in QCA-Based Layered-T Gates Under Cell Defects and Polarisation: A Study with Machine-Learning Models	NA	Journal of Electronic Testing	2024	21/08/2024	40, 435–455 (2024)	SCI	https://doi.org/10.1007/s10836-024-06133-7	Original Research
9	Bapin Mondal	BSH	Deterministic and stochastic plankton dynamics: Effects of contamination, refuge, and additional food sources	NA	Ecological Complexity	2025	02-21-2025	61(March 2025):101117	Scopus, SCI, WOS	https://doi.org/10.1016/j.ecocom.2025.101117	Original Research
10	Geetika Kumari Salwan	ME	Experimental Studies on Microscopic and Mechanical Properties of Nimonic 90 Superalloy Synthesized Using Powder Metallurgy	NA	Journal of Materials Engineering and Performance	2024	18/09/2024	Pg 1-8	Scopus, SCI	https://doi.org/10.1007/s11665-024-10093-6	Original Research
11	Chandrima Sinha Roy	CSE	An opinionated sentiment analysis using a rule-based method	NA	Bulletin of Electrical Engineering and Informatics	2025	15/02/2025	Volume 14, Issue 1, February 2025, Pages 726-732	Scopus	DOI: 10.11591/eei.v14i1.8568	Original Research
12	Debashis Das	CSE	A Review on Fingerprint based Authentication - Its Challenges and Applications	NA	computer Science Review	2025	25/02/2025	57 (2025) 100735	SCIE, Scopus	https://doi.org/10.1016/j.csrev.2025.100735	Review
13	Arpita Chatterjee	ME	Investigating phase and magnetic properties in Co-2 wt.% MWCNT nano-composites prepared by mechanical alloying	NA	Journal of Process Mechanical Engineering	2024	10-09-2024	Volume 1–8	SCIE, Scopus	https://doi.org/10.1177/09544089241279156	Original Research
14	Biswajit Das	BSH	Advanced Stress Imaging in Periodically Strained, Suspended, Quasi-2D Membranes: Manifestation of Fano Resonance and Phonon Dynamics Insights	Jadavpur University	Carbon Trends	2025	29-01-2025	19	Scopus, WOS	https://doi.org/10.1016/j.carbtre.2025.100477	Original Research
15	Bapin Mondal	BSH	How predator harvesting affects prey-predator dynamics in deterministic and stochastic environments?	NA	Applied Mathematics and Computation	2025	03-01-2025	Volume 498, 129380	Scopus, SCI, WOS	https://doi.org/10.1016/j.amc.2025.129380	Original Research

Publications

Sl. No.	Faculty Name	Department	Paper Title	Collaborators/Institutions Involved	Journal Name	Year	Publication Date	Volume, Issue, and Page Numbers	Indexing (SCI, Scopus, UGC, etc.)	DOI	Type of Paper (Original Research, Review, Short Communication, etc.)
16	Arnab Hazra	CSE	SoftWind: Software-defined trajectory correction modelling of gust wind effects on internet of drone things using glowworm swarm optimization	NA	Ad Hoc Networks, Elsevier	2024	01-10-2024	163	Scopus, SCIE, WOS	https://doi.org/10.1016/j.adhoc.2024.103577	Original Research
17	Bapin Mondal	BSH	Influence of Breeding Delays and Memory Effects on Predator-Prey Model Amidst Fear	NA	Brazilian Journal of Physics	2025	08-03-2025	5, 101 (2025)	Scopus, SCI, WOS	https://doi.org/10.1007/s13538-025-01737-6	Original Research
18	Bapin Mondal	BSH	Integrated Dynamics of Eco-Epidemic Systems: Nonlinear Prey Refuge, Predator Exploitation, Fear Impact, and Infection Control	NA	Brazilian Journal of Physics	2025	24/03/2025	55, 115 (2025)	Scopus, SCI, WOS	https://doi.org/10.1007/s13538-025-01744-7	Original Research
19	Bapin Mondal	BSH	CLIMATE CHANGE IMPACTS ON TRI-TROPHIC PREDATOR-PREY MODEL OF THE INTERACTIONS BETWEEN WOLVES, UNGULATES, AND PLANTS	NA	Fractals	2025	15/04/2025	2540106	Scopus, SCI, WOS	https://doi.org/10.1142/S0218348X25401061	Original Research
20	Bapin Mondal	BSH	Cross-diffusive pattern formation and Hopf-bifurcation analysis of two species plankton interaction model	NA	Indian Journal of Pure and Applied Mathematics	2025	22/03/2025	2025	Scopus, SCI, WOS	https://doi.org/10.1007/s13226-025-00775-9	Original Research
21	Prof. (Dr.) Soumitra Roy	CSE	Easy Car Rental Management System	NA	International Journal of Scientific Research in Science and Technology	2025	16-05-2025	Volume 12, Issue 14 May-June-2025 Page Number : 21-27	UGC		Original Research
22	Prof. (Dr.) Soumitra Roy	CSE	MediGeek – A Social Media App for Medical Professionals	NA	International Journal of Scientific Research in Science and Technology	2025	16-05-2025	Volume 12, Issue 14 May-June-2025 Page Number : 96-105	UGC		Original Research
23	Prof. (Dr.) Soumitra Roy	CSE	Zerosphere: Simplifying Financial Management	NA	International Journal of Scientific Research in Science and Technology	2025	16-05-2025	Volume 12, Issue 14 May-June-2025 Page Number : 106-112	UGC		Original Research
24	Dr. Biswajit Das	BSH	Low-frequency $1/f$ noise and barrier height inhomogeneity in topological insulator based photodetectors	IACS, JU	ACS Appl. Mater. Interfaces	2025	30/05/2025		SCI	https://doi.org/10.1021/acsami.5c07584	Original Research
25	Bapin Mondal	BSH	Exploring the influence of hunting cooperation, fear, and incommensurate memory effects on generalist predator-prey model	NA	Nonlinear Dynamics	2025	06-03-2025	2025	Scopus, SCI, WOS	https://doi.org/10.1007/s11071-025-11316-8	Original Research
26	Bapin Mondal	BSH	Dynamics of Ebola Virus Disease with awareness effects: a case study of guinea and sierra leone	NA	Nonlinear Dynamics	2025	06-08-2025	2025	Scopus, SCI, WOS	https://doi.org/10.1007/s11071-025-11286-x	Original Research
27	Krishnendu Kundu, Baibaswata Das	CE	Infrastructural Development of Engineered Landfills	NA	International Journal of Scientific Research in Science and Technology	2025	30/05/2025		UGC	doi: https://doi.org/10.32628/IJS	Original Research
28	Souradeep Roy, Krishnendu Kundu, Sourav Kumar Singha	CE	Advancing Technologies and Strategies for Achieving Carbon Neutrality	NA	International Journal of Scientific Research in Science and Technology	2025	30/05/2025		UGC	doi: https://doi.org/10.32628/IJS	Original Research
29	Kalyan Mukherjee, Pritam Bhattacharjee	AUE	A Review on synthesis, application and performance of oil extracted from waste plastic	NA	Journal of Xidian University	2025	14/04/2025	Volume 19, Issue 4, 2025	Scopus	https://doi.org/10.5281/Zenodo.15210875	Original Research
30	Debjit Misra	AUE	Development and Characterization of Nickel-Based Self-Lubricating Electroless Composite Coatings Involving SiC and hBN	NA	Journal of Materials Engineering and Performance	2025	25/04/2025		SCI	https://doi.org/10.1007/s11665-025-11210-9	Original Research

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Committee List 2024-25

Committee List

Board of Governors (BOG)

Sl. No.	Name	Particular	Position
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2	The Regional Director	AICTE, Eastern Regional Office	Member
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6	Mr. Haranjit Singh	Trustee Member, JIS Foundation	Member
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10	Mr. Amanjot Singh	Member, JIS Foundation	Member
11	Mr. U. S. Mukherjee	Deputy Director, JIS Group	Member
12	Mr. Amit Srivastava	Managing Director, Hash Technology	Member
13	Dr. Asit Guha	JIS Group (Educationist)	Member
14	Dr. Biswajit Das	Convener, R&D Cell, DSCSITSC	Member
15	Dr. Debashis Das	IQAC Coordinator, DSCSITSC	Member
16	Mr. Anirbit Sengupta	Deputy Registrar, DSCSITSC	Member
17	Prof. (Dr.) Saradindu Panda	Principal, DSCSITSC	Member Secretary

Committee List

Academic Council

Sl. No.	Name & Designation	Department /Category	Role
1	Dr. Saradindu Panda, Principal	Admin	Chairman
2	Prof. (Dr.) Manojit Mitra, Dept. of ECE, IIST Shibpur	External	University Nominee
3	Prof. (Dr.) Subhasish Bhowmik, Dean R&D IIST Shibpur	External	University Nominee
4	Prof. (Dr.) Amitava Chatterjee, Dept. of EE, JU	External	University Nominee
5	Prof. (Dr.) Goutam Sutradhar, Director, NIT Manipur	External	External Academic Expert
6	Prof. (Dr.) Debashis De, Professor, MAKAUT	External	External Academic Expert
7	Prof. (Dr.) Mita Nasipuri, Professor, Jadavpur University	External	External Academic Expert
8	Mr. Atanu Chowdhury, Deputy General Manager- HR & IR, Electrosteel Castings LTD	External	Industry Expert
9	Dr. Indranil Das, CEO, Synchro Electronics, Kolkata	External	Industry Expert
10	Dr. Debashis Das	CSE	IQAC Coordinator
11	Mr. Sanjoy Bhattacharjee	CSE	Assistant Controller, Exam Cell
12	Dr. Biswajit Das	BSH	Convener, R&D Cell & Member Secretary of Academic Council
13	Dr. Arijit Acharya, HOD	CE	Member
14	Dr. Amrut Ranjan Jena, HOD	CSE	Member
15	Dr. Hrishiraj Ranjan, HOD	AUE	Member
16	Dr. Sayantan Chakraborty, HOD	EE	Member
17	Dr. Arpita Chatterjee, HOD	ME	Member
18	Dr. Dipankar Das, HOD	BSH	Member
19	Dr. Anirban Neogi, HOD	ECE	Member
20	Dr. Soumitra Roy, Faculty	CSE	Member
21	Dr. Arindam Sadhu, Faculty	ECE	Member
22	Mr. Baibaswata Das, Faculty	CE	Member
23	Mr. Kalyan Mukherjee, Faculty	AUE	Member

Committee List

Other Institutional Committee

SI No	Committee Name
1	BOG Committee
2	Institutional Academic Committee
3	Internal Quality Assurance Cell
4	Finance Committee
5	Disciplinary & Grievance Redressal
6	Anti - Ragging Committee
7	Anti - Ragging Squad
8	Internal Complaint Committee
9	SC & ST Committee
10	Academic Council
11	Exam Cell
12	Store & Purchase Committee
13	Library Committee
14	Innovation & Incubation Cell
15	Industry Institute partnership Cell
16	Training & Placement Cell
17	Research & Development Cell
18	Student Life Centre & Extracurricular Committee
19	Admission Cell
20	Academic & Administrative Audit Committee
21	Alumni Cell
22	NSS & NCC Committee
23	Women Cell
24	Sports Committee
25	Canteen Committee
26	Entrepreneurship Development Cell
27	Science & Technology Committee
28	Hostel Committee
29	Student Affair/ Welfare Committee
30	Timetable Committee

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