ANNUAL REPORT

July 2018 to June 2019

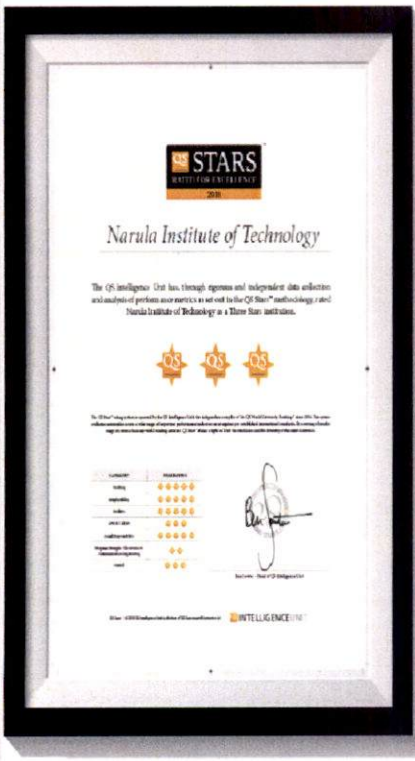
Narula Institute of Technology

81, Nilgunj Road, Agarpara Kolkata – 700109

West Bengal

NARULA INSTITUTE OF TECHNOLOGY
NIT
KOL-109

- : ACHIEVEMENT GOALS : -



NiT has become the Ist Institution in Eastern India to earn the prestigious QS International Star Rating

NiT has secured NIRF ranking once again like previous year in Engineering field in the rank band of 101-150

NiT has been awarded as Best Private Engineering College in East India at "National Education Excellence Award 2017"

NARULA INSTITUTE OF TECHNOLOGY ★ KOL-109 ★

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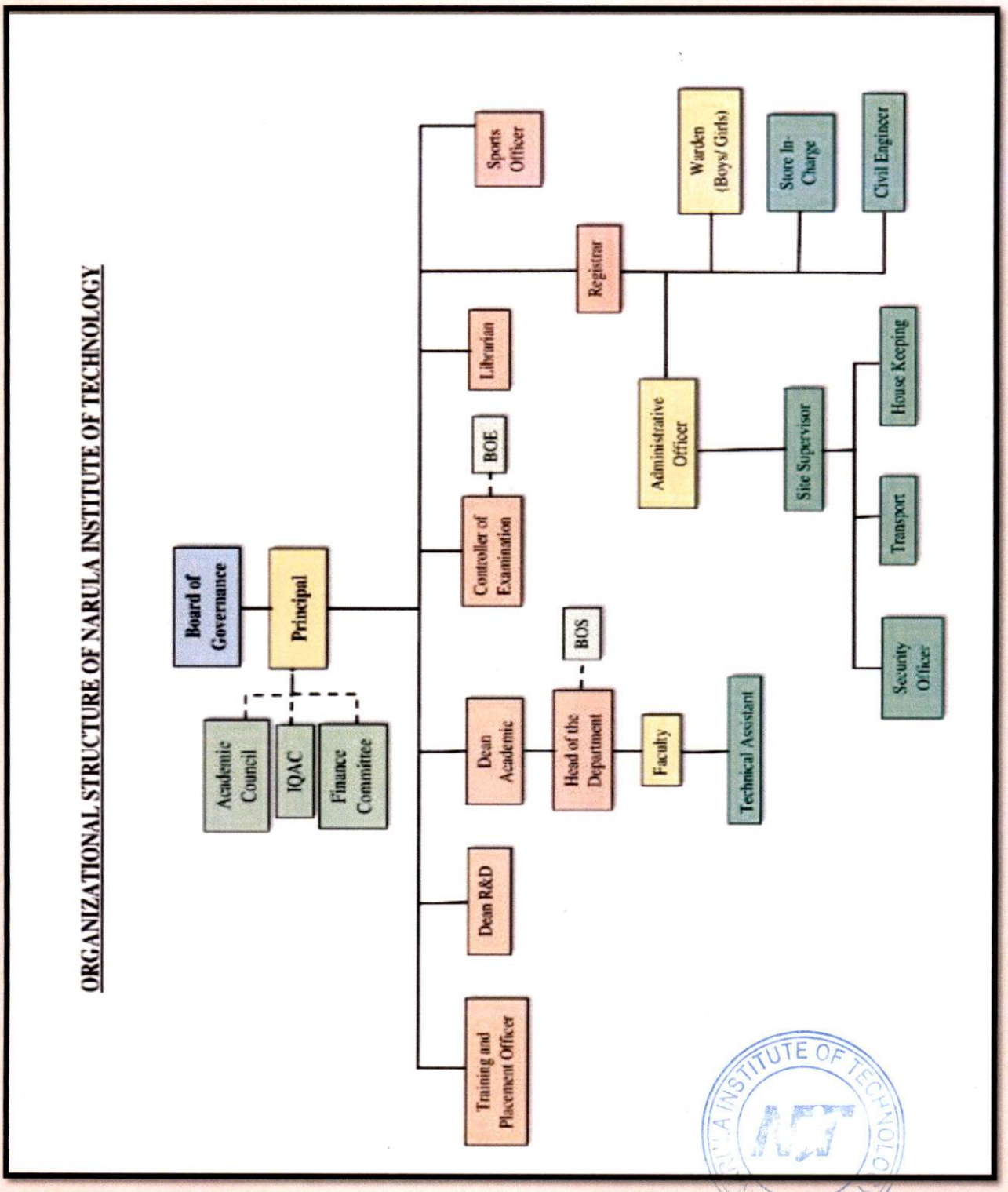
Institutional Structure



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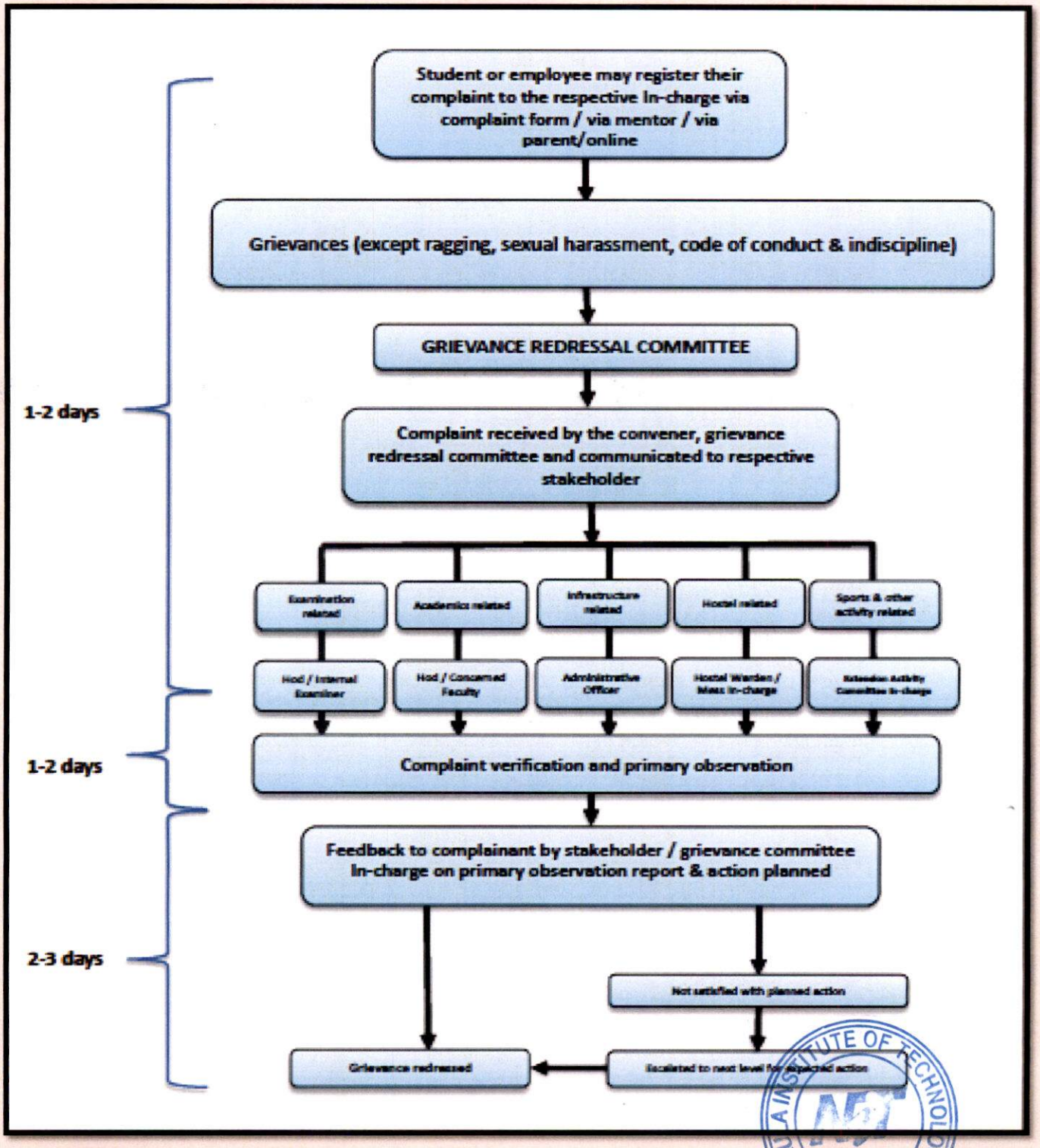
GRIVANCE REDRESSAL



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Principal's Message

"It gives me immense joy to be associated with Narula Institute of Technology, which has made a deep impact and has spread its deep roots in the field of education. I feel proud and privileged to be the part of this magnificent institution for the past decade. At this juncture, I gratefully acknowledge the yeomen service rendered by my visionary predecessors, dedicated teachers and ever supporting management body who have worked selflessly and tirelessly to bring glory and honour to NiT.

We are living in a fast changing world of society today. Everything is changing at a speed. Human life in general has become more frustrating and complex today. Many have become more self-centred, egoistic, intolerant, corrupt, suspicious, hedonistic etc. As an educationist, I personally believe that no one would ever argue for a value less system of education. If you and I believe and accept that
education is a formative process, then the teachers in particular have a greater role to play in the fast changing world of society today to instil human values in the children and to prepare them to face life as it comes.

I am pleased to acknowledge that NiT lays its stress not just on academic excellence but on "character formation with academic excellence". It motivates students to "always aim high" and cultivate core values as a first place for the Divine, integrity of character and maturity in behavior, pursuit of excellence and creative genius, respect of the human person with an emphasis for elders and teachers, loyalty to the nation and a balanced understanding of the prevailing global situation.

I wish and pray that the students of NiT may imbibe with the qualities of human values and become socially conscious, intellectually competent, culturally relevant, morally upright, religiously vibrant and emotionally balanced.

I am immensely proud of my teaching fraternity at NiT, whose indomitable spirit to learn, innovate and implement have taken NiT to such heights. I wish and pray for them all success.

Thus, to keep on marching ahead, I say and believe-------

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"A desire can change nothing, a decision can change

Something but a determination can change

everything".

Thus I hereby present the annual report of 2018-19 on behalf of the Institute.

Prof. (Dr.) Maitreyi Ray Kanjilal

Principal
Narula Institute of
Technology (Under the
aegis of JIS Group)

Principal
NARULA INSTITUTE OF TECHNOLOGY
81, Nilguni Road, Agarpara, Kol-109

Chapter 2 About The Institute

Introduction

Narula Institute of Technology is a leading autonomous Engineering & Management college, located at Agarpara near Kolkata under the aegis of JIS Group Educational Initiative since 2001.

It is approved by AICTE and affiliated to MAKAUT, formerly known as West Bengal University of Technology and has NBA accredited degree programmes in engineering. It boasts of the prestigious NIRF ranking among 150 selected institutes of India. It is also accredited by National Assessment and Accreditation Council (NAAC). The college has also received the notable World Bank Assisted and MHRD approved TEQIP (Phase II) grant for the advancement of Technical Education. It is eligible for receiving Central assistance under the recognition of 2(f) & 12(B) under UGC Act.

The four year B.Tech course is imparted in the streams of Computer Science Engineering, Electronics and Communication Engineering, Electrical Engineering, Civil Engineering, Information Technology, Electronics and Instrumentation Engineering and Mechanical Engineering. The institute provides a brilliant platform for pursuing higher studies through PG courses like **M.Tech** (CSE, ECE, EE- Power System, CE- Structural Engineering),and MCA. It has expanded to include diploma programs in EE, CE and ECTC under the affiliation of West Bengal State Council of Technical Education.

The institute boasts of a powerful R & D cell with immense contribution from the scholarly faculty members. There is an enormous repository of **International and National Journal publications, E-books, Online Lectures** which have drawn nationwide attention. With the encouragement and support from the college, around ten projects funded by organizations like **UGC, BRNS and AICTE** are running successfully by the faculty members till date. Very recently the ECE Department has secured the MODROBS grant for upgrading their Embedded System and Electronic Design Automation Lab.

The college is in collaboration with Tech Mahindra, Reliance Jio Infocom Ltd, CII, NASSCOM, Aspire Disruptive Skill foundation, Oracle, INFOSYS, TCS, NIT Sikkim, IIT-KGP, AIT Bangkok and other organizations of repute. The students get an opportunity to interact in an international platform through seminars, conferences and special teaching-learning sessions. The student chapter plays a crucial role in organizing informative technical events within the campus. At present there are five student chapters in our college: IETE student forum of Electronics & Communication Engineering Department, ICE & ASCE of ivil Engineering Department, CSI of Computer Science Engineering, Information Technology & MCA Department and Institute of Engineers India (IEI) of Electrical Engineering Department.

Apart from academics, the students get an exposure to the world of co-curricular activities which help them in shaping and grooming their personality. The students made the college proud by winning laurels in some recent cultural events organized by Telegraph, Maruti Suzuki. Thus, the cornerstone of the successful evolution of Narula Institute of Technology lies in its modern teaching learning process, good ragging free environment, meticulous tutoring and mentoring of the future professionals of the industry as well as of academia, where the Institute's success has always been directly proportional to the success of the students.

VISION

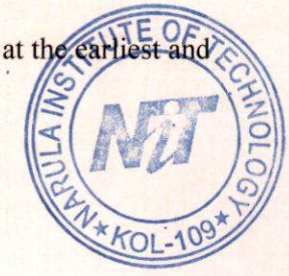
- To make the Institute excellent in technological education and research by imparting equitable, inclusive, ethical, flexible and multidisciplinary knowledge to budding technologists to serve the society.

MISSION

- To establish continuously improving academic ambience in the Institute in order to prepare the students with beyond curriculum knowledge, creativity, innovation, problem solving abilities, teamwork, communication skills etc. for their holistic development.
- To collaborate with Institutes of higher education, Professional Societies, R&D and Industrial organisations for continuous improvement of academic, research environment in the Institute and to build a strong Industry-Institute interface.
- To promote and nurture entrepreneurial and innovative quality of the students providing proper education, training and supportive facilities so that future entrepreneurs emerge with flying colors.
- To strengthen quality and knowledge-base of faculty through faculty development programmes for continuous upgradation to remain in tune with dynamically changing technology.

QUALITY POLICY

- Best standards and practices of good governance, to be put in place to bring in transparency of operations and improve credibility at all levels.
- Industry-ready professionals to be developed through Interactive Teaching-Learning Process, Corporate exposure and project work.
- Higher Studies/research for Faculty & Staff to be encouraged for up gradation of knowledge which would, inter alia, include participation in TEQIPs, Seminar, workshop etc.
- Appropriate Laboratory facilities would be developed in selected areas to provide fillip for R&D.
- Industrial consultancy to be carried out in an effective manner through Industry Institute Partnership cell (IIPC) for developing a sense of accomplishment.
- NBA accreditation for all AICTE approved programmes to be obtained at the earliest and maintained on a long –term basis.



OUTCOME BASED INSTITUTIONAL OBJECTIVE

To create an environment to empower the students with solid foundation in mathematical, scientific, engineering, managerial, entrepreneurial fundamentals and incorporate research based curriculum thorough establishing continuous wide network with the industries in order to initiate long term academic excellence in the institution.

Chapter 3

Admission

Narula Institute of Technology offers a number of courses ranging from Engineering (B.Tech and M.Tech), and Computer Application (MCA). Diploma Engineering are taught in branches of Electronics & Communication Engineering (ECE), Electrical Engineering (EE) and Civil Engineering (CE) is also taught.

Each of the courses offered have a separate Entrance Test according to their respective Government of West Bengal examination boards.

Student admission for B.Tech is through **WBJEE**. Where as for M.Tech the intake is through **GATE** score and **PGET** examination.

The admission for MCA is through **JECA.**

The entrance test for Diploma courses is **JEXPO**.

Also as per Government norms, 10% seats are reserved for Diploma Engineering students for admission (Lateral Entry) to B.Tech 2nd. Year The admission occurs through **JELET**.

Apart from this, admission also occurs through **Common Entrance Examination AMPAI,** which is an entrance examination conducted by the Association of Minority Professional Academic Institutes (AMPAI). Except for Lateral entry in Engineering, 50% seats are reserved in each course, whereby admission occurs through AMPAI.

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Institutional Events :

Swagatam 2018,the 3 weeks Orientation Programme for the 1st year undergraduates commenced today by welcoming hundreds of cheerful young learners. Among many special sessions some sessions need to be mentioned like Mind Training and Motivational Talk by Swami Tattwesarananda,Principal, Belur Math Ramkrishnamission Sikshan Mandir ,the speech delivered by Member Secretary of AICTE,Prof.(Dr).A.P.Mittal and the Director,AICTE, Dr. Manpreet Singh Manna. The fifth day of SWAGATAM 2K18 witnessed the awesome session on Value Crisis In Contemporary Society and Positive Thinking by Mr Beni Kinha, renowned Motivational Trainer

Women Cell published the 3rd volume of annual news letter called Swayam Siddha which explores the women talents and tries to voice the women issues and agendas.

20th August Sadbhavna Divas

This day the Institute celebrates the birth anniversary of Rajiv Gandhi. The word Sadbhavna in English means Goodwill. So this day is spent by the students promoting communal harmony, peace and affection among each other, as future citizens of this country.

Freshers' welcome Parichay was organized on 31st August. Exuberant collage of songs, dance performances, drama and music prepared the platform for campus social interaction and development of harmonious bonding, which paves the way to connect hearts of the young talents of NIT, interweaving the passion and culture generating a happier life.Sustained involvement in extra-academic activity reflected the vast pool of new talents promising to take NIT to newer heights.

Teacher's Day (Birth Anniversary of Dr. Sarvepalli Radhakrishnan)

The Day was celebrated by the Institute as Teacher's Day with gala events, of students participating in cultural programmes and spending quality time with their educators.

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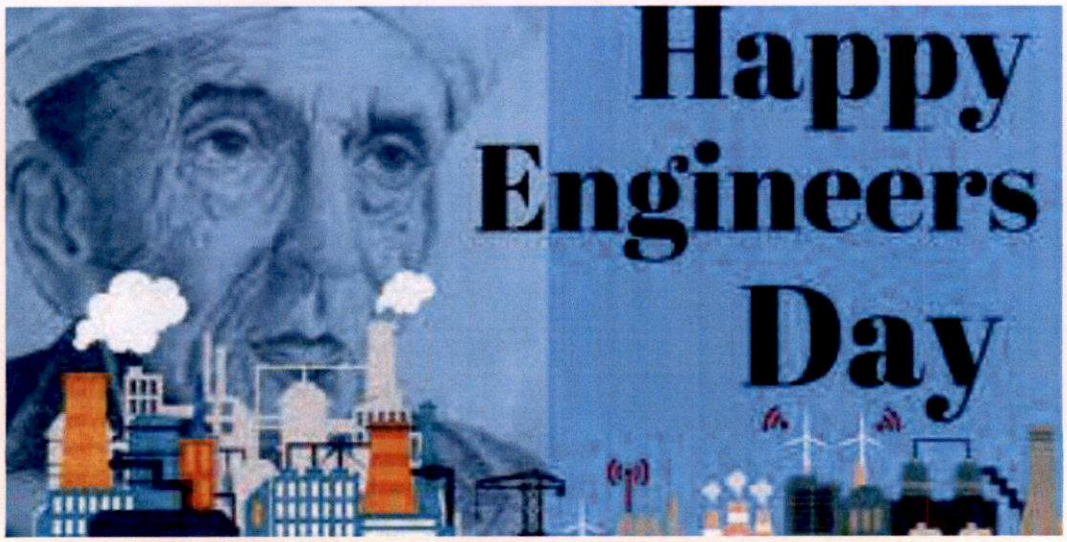
15th September National Engineer's Day (Birth Anniversary of Mokshagundam Visvesvaraya)

The day is celebrated as birth anniversary of Mokshagundam Visvesvaraya, engineer oar excellence whose work in constructing the Krishnaraja Sagar Dam in Mysore is hailed as the one of first works of modern engineering in India. As an engineer his legacy is a motivational drive force for the students . The day is celebrated by our students at the institute by attending lectures and symposiums on engineering topics and enriching their knowledge on the same.



Narula Institute of Technology organized the Biswakarma Puja on 17/09/2018 (Monday) at college premises. Puja was held at 11 am and after Puja distribution of Bhog took place.

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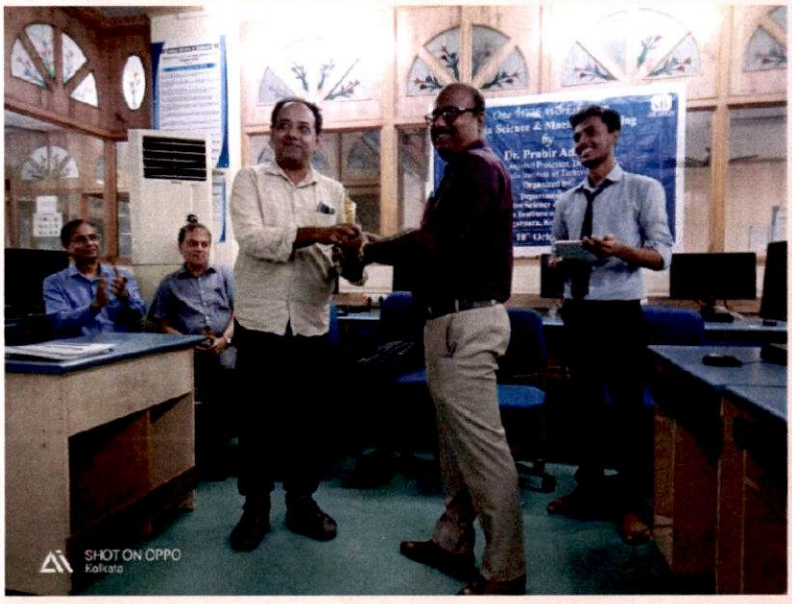
Computer Science and Engineering Department of Narula Institute of Technology organized a workshop on "DATA ANALYSIS AND MACHINE LEARNING", from 4th October-11th October, 2018,



NiTians infused the spirit of Durgotsav by a colorful celebration titled "Pre Puja Euphoria" on 12th October, 2018.The staff members chanted Agamani songs and recited self composed poetry which added colour to the Puja Adda.The euphoria reached its pinnacle with the Dhunuchi dance at the beats of dhaak centering round theRangoli made by the students in the lobby.The celebration marked the demolition of good forces over the evil ones.

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A one day seminar on "Stratosphere Communication" was held at the Seminar Hall, Narula Institute of Technology on 12th October 2018. More than 80 students and 30 staff members and faculties were present.Prof. (Dr.) J K Mandal, Kalyani University, Honorary. Sec. IETE Kolkata, was the keynote speaker of the day.The program was organised by ECE Department, NiT on behalf of ISF (IETE Student Forum).

"Swachh Bharat Abhiyaan" was organized in Narula Institute of Technology on 1st November,2018. The programme was inaugurated by our honorable Principal Prof.(Dr.) M.R Kanjilal and Registrar Ms. Nidhi Singh. Students started the campaign and launched the cleanliness drive throughout college campus.

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Narula Institute of Technology has organised a seminar on "Blockchain in Educational Institutes" on 1st November,2018. The key speakers of the event were Mr. Santanu Mitra and Mr. Sudipto Chowdhury, Senior Architects, IBM India Pvt.Ltd.

The birth anniversary of Sardar Vallabhbhai Patel, the "Iron Man of India" was celebrated as the "National Unity Day" at Narula Institute of Technology on 31st Oct 2018.

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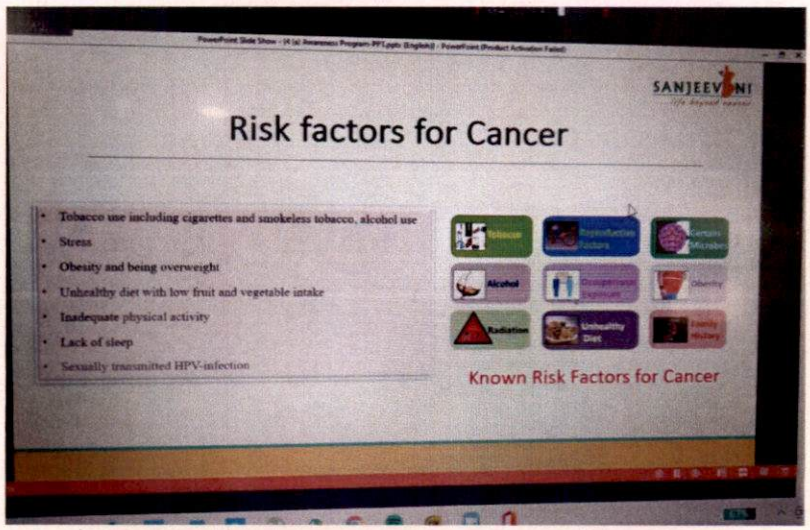
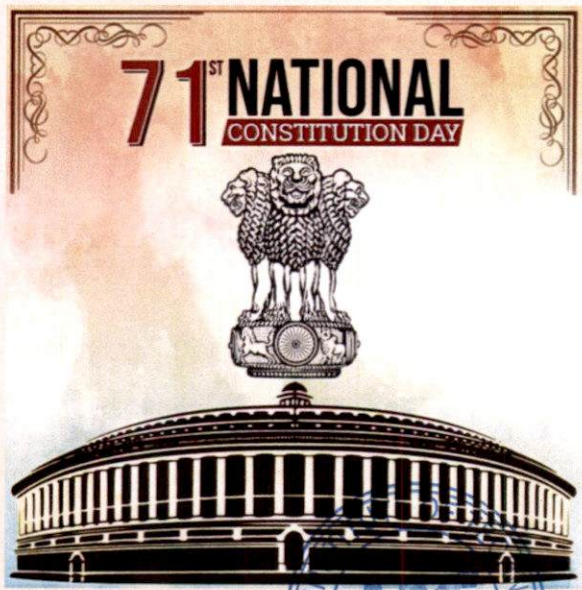
7th November National Cancer Awareness Day

This day is celebrated at the Institute owing to the utmost importance of diagnosis of this fatal and life-altering disease which is on the rise. We lose many unfortunate souls to this debilitating disease every year and the numbers are rising every year. It is the need of the hour to be prepared and be informed to avoid unnecessary panic and fear. The day is celebrated by paying homage to those who have passes from this disease before and then attending seminars and expert talks and with poster making competition around the topic of cancer, its early diagnosis, prevention, cure etc.



26th November Constitution Day

This day marks the auspicious occassion when the constituent assembly adopted the Constitution of India more than 70 years ago. The day is consequently spent by students learning the constitution and the rights it grants them as citizens and understand the core beliefs upon which the foundational principles of the Republic of India is based on. Students attend special seminars to learn their constitution and there are pledge taking ceremonies as well.



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Narula Institute of Technology has organized the 2nd International Conference on Computational Advancement in Communication circuit and System (ICCACCS-2018) on 23rd & 24th November, 2018. The conference aimed at bringing together national and international researchers, industrial experts and academicians to present papers and generate discussions on current research and development in state-of-the-art technologies in Modelling of Energy Systems, Computing and communication, Environment friendly computing, Reconfigurable computing and Low power Nano Technology and VLSI Design which will provide a forum for sharing insights, experiences and interaction on various facets of evolving technologies and patterns related to Computer Science, Information Technology Electronics and Electrical etc.

A series of lectures held in Special Session on Quantum Computing which is the first time in any private Engineering in Eastern India.

ECE Department, NiT has opened IEEE Student Branch & IEEE CAS Student Branch Chapter.The Inauguration was held on 28th November, 2018 at the Institute seminar hall.

The addressing session was opened by Ms. Debarati Mitra and Mr. Ranit Dey, IEEE Interim Student Branch CAS Student Branch Chapter under ECE department followed by motivating addresses by Prof. M.R. Kanjilal, Honorable Principal, NiT, Mrs. Nidhi Singh, Honorable Registrar,NiT, Prof. S.C. Konar, Honorable Dean (R&D), NiT, Prof. S.K. Sanyal, Immediate Past Chair IEEE CAS Chapter, Kolkata and faculty of ECE department, NiT, Prof. A.K. Mukhopadhyay, Former Group Director, S.R Group of Institutions, Jhansi, Prof. J.K. Roy, Chairman IEEE Circuit and System Chapter, Kolkata Section. Chair, ECE Department, NiT who addressed on the introduction and the objectives of the IEEE Student Branch and IEEE.

The Entrepreneurship Development Cell (EDC) of Narula Institute of Technology, organized an interactive session on"Entrepreneurial Session for budding Entrepreneurs" on 7th February, 2019 with an aim to create Entrepreneurship Culture in the Institute. The honourable speaker was Mr. Atul Khanna, Director & Founder, Tooltech Global Engineering Pvt. Ltd.

14th December National Energy Conservation Day

The day is celebrated in the institute to mark the country's collective progress into becoming an energy efficient nation. The day is celebrated by students by presenting projects and presentations outlining innovative ideas required to reduce energy wastage in the future.

2019 12th January (National Youth Day) Birth Anniversary of Swami Vivekananda

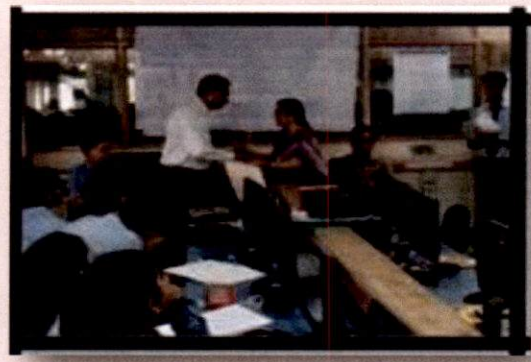
This day is celebrated at the Institute with great enthusiasm by students. Swami Vivekananda even a Century after his birth, is a Youth Icon and his words and his dialogues with Ramakrishna Paramhansa is a source of inspiration for young and adults alike. His motivational guidance is responsible for spearheading countless successful Indians towards action. The students remember and pay homage to swamiji through presentations on his teaching, paintings, poetry, essays, special seminars etc

Narula Institute of Technology has organised an Inter School winter Carnival, "ECSTASY 2K19" on 29th January,2019 at the Institute premises.

About 1000 students from 50 schools participated along with their respective teachers and parents and around100 students were from 2 special schools.The students who attended the programme were between classes VIII to XII.The school kids participated in different attractive programmes like Clash of Brain(Science Quiz), Code Mania (CodingContest), arang(Antakshari), Robotics Workshop,Project Display,RongeKhela(Rangoli),Impulse (NiT Josh Talk), Kudos to Kids(Cultural program by the specially abled kids), Fotonic (Photography) etc. The winners also received prize from our honorable judges and dignitaries of NiT

One Week Workshop on 'Data Analysis& Machine Learning' 4thOctober-11thOctober, 2018

Computer Science and Engineering Department of **Narula Institute of Technology** organized a workshop on **"DATA ANALYSIS AND MACHINE LEARNING"**, from **4th October-11th October, 2018**, where we have the 3 Eminent experts from the industry. **Dr. Prabir Aditya,** an adjunct professor of CSE department, who is not only just a professor but also a co-founder of "Domain Technology Orchestrator". **Dr. Anupam Mukherjee** who is chief "Data Scientist" and have been in this field for numerous years. He is also a co-founder of "Domain Technology Orchestrator". **Mr. PadmanavaRudra**who is "Vertical Head" and have been working for last 36 years in various renowned companies. Currently he is serving as a vertical head in "Spring and River".This Workshop was flagged off in the presence of our Honorable Principal **Prof. (Dr.) M. R. Kanjilal**, our respected HOD **Mr. Jayanta Pal,** program coordinator **Ms. Sagarika Chowdhury,** and all other eminent faculty members of CSEdepartment.



NarulaInstituteofTechnologyhasorganizeda seminar on **"Blockchain in Educational Institutes"** on **1stNovember,2018**.Thekeyspeakers of the event were Mr. SantanuMitra and Mr. Sudipto Chowdhury, Senior Architects,IBMIndia Pvt.Ltd.The event was started by the welcome address by our honorary Principal, Prof.(Dr.)M.RKanjilal followed by the felicitation of guests. **More than 220 students from NiT, GNIT,JISUniversityandJISCE** attendedthe seminar alongwithour Registrar,HODsandfacultymembers.

NARULA * KOL-109 * INSTITUTE OF TECHNOLOGY

On 31st January, 2019, Mr.Amit Ray, Managing Director, Protiviti India delivered a session on "DIGITAL
DISRUPTION IN EDUCATION " at Narula
Institute of Technology.The object of the session was to provide a glimpse of the future of Education and opportunity to Academicians to take a fresh look at their strategy and re-evaluate the type of student experience they wish to provide. Mr. Amit Ray is a Managing Director at Protiviti and leads Protiviti's Information Management, Data & Analytics and Digital Transformation solutions in Middle East and India. Mr Ray specializes in data science, business intelligence and decision analytics and has engaged with business leaders globally to solve business problems with disruptive solutions which leverage data and digital technologies

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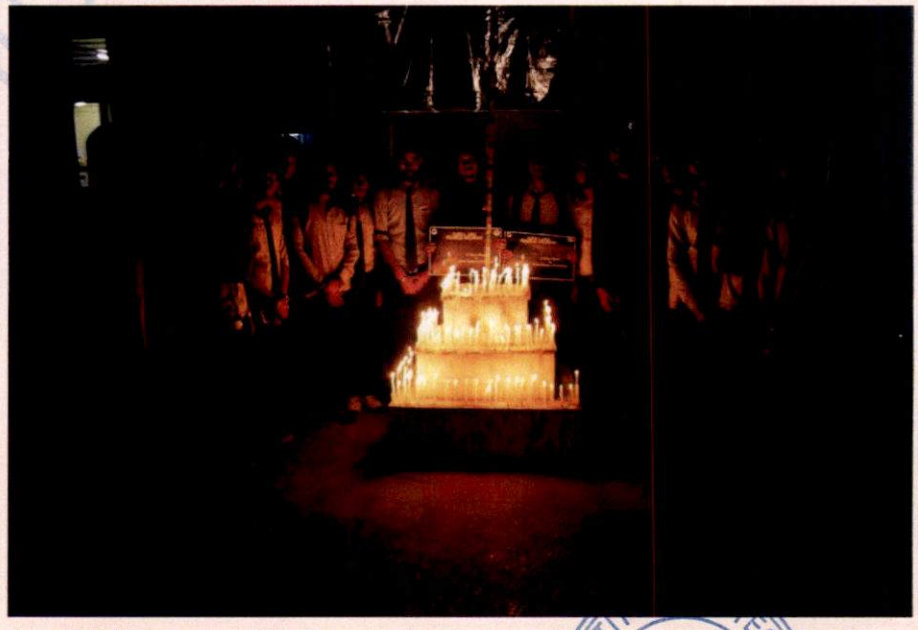
On the auspicious day of Saraswati Puja, the students and faculty of Narula Institute of Technology came together to seek the blessings of the goddess of knowledge, music, art and culture. The ritual was graced with the presence of all the students, staffs and faculty. NIT has celebrated the puja with same fervor as it celebrated different festivals with. Believers as well as non-believers, all came together under one roof to celebrate this festival. Saraswati Puja is a popular festival of students. These celebrations at campus ensure that students find a home away from home. Both the faculty and students joined hands together, with great zeal to make the event a memorable one also evoking the blessing of the goddess of knowledge to have a successful academic and carrier growth.

Some incidents never fades and left its deep impact.Such inhuman incident happened on 14 February 2019 when a convoy of vehicles carrying security personnel on the Jammu Srinagar National Highway was attacked by a vehicle-bound suicide bomber at Pulwama district, Jammu & Kashmir. The attack resulted in the death of 40 CRPF personnel and the attacker and left several others injured.It is the deadliest terror attack on state security personnel after the URI attack killing 19 soldiers in September,2016.



To pay homage to the brave souls who lost their lives in the Pulwama terror attack, the students, faculty & staff members of Narula Institute of Technology organised a Tribute and Silent March yesterday,15th February 2019 from the institute to the nearby areas.

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On 7th Feb, 2019,a team of delegates from Italy representing the CII visited Narula Institute of Technology and the CII Innovation centre. The team of 6 delegates was led by Mr. Luigi Mazza. The team was welcomed and a formal introduction about the college, infrastructure facilities and the CII innovation centre was given by Prof. J.K. Das,Advisor,NiT. The meeting was also graced by Prof (Dr.) M.R. Kanjilal, honourable Principal, Ms. Nidhi Singh,Registrar, Ms. Punita Gaba,Executive Administration, Prof. Dr. B.K. Medya,HOD,IT Dept and Ms. Sandhya Pattanayak, Asst.Prof,ECE Dept.

21st February Bhasha Divas (International Mother Language Day)

The International Mother language Day or Bhasha Divas is celebrated with cultural festivals in different languages at the Institute. As a day that celebrates and glorifies one's identity as a native speaker of a particular language, The day also marks as a reminder for the beautiful linguistic diversity of this country. Students present cultural programmes like recitation, group and solo singing, skits ans street plays etc.

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The IETE Student Forum, Electronics and Communication Department of Narula Institute of Technology organised a seminar on "Some Aspects of CMOS and VLSI Circuit Design" for ECE students in collaboration with IETE Kolkata Centre on 22nd February,2019 at the Institute.

Narula Institute of Technology has organised a one day seminar on 6th March,2019 at the JIS University Auditorium . The key speaker was Mr. Richard A. Posthuma,Professor of Management,UTEP(University of Texas El Paso).

The plenary session was "Improvement of Interview Skills" for the prefinal year students where Mr. Posthuma discussed the different aspects such as soft skills, body language and the most common questions asked during an interview. More than 200 students attended and cleared their doubts on cracking an interview.

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Electrical Engineering Department of Narula Institute of Technology successfully completed an Industrial Workshop on "Embedded System and Application of Solar Energy"from 25th February 2019 to 6th March 2019 under Engineering College Student Chapter (Institute of Engineers-INDIA)-Department ofElectrical Engineering in collaboration with TETMAX Technologies.

The women cell of Narula Institute of Technology has organised a "Creative Writing Competition" on 8th March 2019 to celebrate the International Women's Day where total 41 students have participated from all the departments.

The Electrical Engineering Department of Narula Institute of Technology had arranged a one day seminar on "Modern Trends of Electrical Engineering in Industry" on 28th March 2019 at the Institute.

22nd April World Earth Day

The day is celebrated at the Institute as a marker of the single largest commemorative environmental event worldwide. The global celebration of the day from earthday.org now involves over 1 billion people. The institute is a part of the billion in building environmental awareness.

The NSS Committee of Narula Institute of Technology has organised a Blood Donation Camp on 8th May,2019 at the Institute

A team of one doctor and six technical staffs of NRS MCH blood bank came for collection of blood where 80 students donated their blood and out of which 12 were girls.

To commemorate the 158th Birth Anniversary of India's heritage, "Kabi Guru" Rabindranath Tagore, the Cultural Committee of Narula Institute of Technology has organised Rabindra Jayanti on 9th May,2019.

The faculties and staff showcased their love and respect for Rabindranath Tagore through various performances composed by the great Tagore.

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B. Tech CSE 1st year students of Narula Institute of Technology, in an effort to contribute their bit towards society, joined hands to donate clothes among the less fortunate. The donation was carried out on 9th May 2019.

The Farewell Ceremony,Bidding Adieu 2K19,the heartfelt tribute to the final year students of Narula Institute of Technology was organised by the prefinal year students on 16th May,2019 at the college premises and was celebrated with lots of zest and zeal making it one of the unforgettable moments in their lives. Students were high on their feets and had tremendous enjoyment. Their gleeful faces reflected the attitude, values and love they share with NiT family.

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Student Centric Activities

Student Centric Activities are a conglomeration of the development of **Soft Skills, Language and Communication Skills, Life Skills, Trends in Technology Skills.**
Soft skills focus on who people are, as opposed to what they are trained in. They serve to represent your approach to life and work meaning soft skills are interpersonal skills hardwired to an individual's personality, and they characterize how you interact with other people in the workplace. The training on Language and Communication Skills intends to create awareness of one's current presentation skills and practice & develop effective skills for presentation, understand the importance of communication types, developing effective verbal communication, importance of grooming and etiquette and cross-cultural communication. Learning and adapting new Life skills, we increase our understanding of the world around us and equip ourselves with the tools we need to live a more productive and fulfilling life, finding ways to cope with the challenges that life, inevitably, throws at us. Technology is rapidly changing the way we live and interact. It is changing the face of every field and every sector in the best way possible. Education technology can help to eliminate current barriers of providing quality education to all and will provide a chance to widen the imagination of the students and help them grasp better. The education sector and the entities such as students, teachers, management, parents, etc. will benefit a lot from the latest and upcoming trends in education technology.
A documentation of such yearly activities is provided herewith.

Soft Skill

Training are organized for enhancement of the interview skills and techniques, time management, decision-making, problem-solving ability of students. This kind of trainings develops students for various campus recruitment and competitive examinations.
Training and placement cell provides various opportunities for overall growth of the student by organizing value-added programs. Career Development Programs are also conducted on a regular basis for value addition in the lives of our students.

Name of the capability enhancement program	Date	Name of the agencies/consultants	Objective
Verbal, Non-Verbal Training-EE 2nd year	13-03-2019	Mr. Rahul Basak, Career Launcher	Enhancement of verbal and nonverbal communication
Verbal, Non-Verbal Training EIE 2nd year	08-03-2019	Mr. Rahul Basak, Career Launcher	Enhancement of verbal and nonverbal communication
Verbal, Non-Verbal Training-ME 2nd year	01-03-2019	Mr. Rahul Basak, Career Launcher	Enhancement of verbal and nonverbal communication
Verbal, Non-Verbal Training-CE 2nd year	25-02-2019	Mr. Rahul Basak, Career Launcher	Enhancement of verbal and nonverbal communication
Verbal, Non-Verbal Training- IT 2nd year	20-02-2019	Mr. Rahul Basak, Career Launcher	Enhancement of verbal and nonverbal communication
Verbal, Non-Verbal Training - EE 2nd year Sec B	08-02-2019	Mr. Rahul Basak, Career Launcher	Enhancement of verbal and nonverbal communication

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Verbal, Non-Verbal Training –2nd year Sec A	04-02-2019	Mr. Rahul Basak, Career Launcher	Enhancement of verbal and nonverbal communication
Verbal, Non-Verbal Training- 2nd year Sec B	14-01-2019	Mr. Rahul Basak, Career Launcher	Enhancement of verbal and nonverbal communication
Verbal, Non-Verbal Training-ECE 2nd year Sec A	07-01-2019	Mr. Rahul Basak, Career Launcher	Enhancement of verbal and nonverbal communication
Verbal, Non-Verbal Training-CSE 2nd year Sec B	30-11-2018	Mr. Rahul Basak, Career Launcher	Enhancement of verbal and nonverbal communication
Verbal, Non-Verbal Training- 2nd year Sec A	19-11-2018	Mr. Rahul Basak, Career Launcher	Enhancement of verbal and nonverbal communication
Soft Skill Training – EIE 1st year	19-09-2018	Mr. Tapas Mukherjee, Target Education	Enhancement of soft skills
Soft Skill Training - IT 1st year	14-09-2018	Mr. Tapas Mukherjee, Target Education	Enhancement of soft skills
Soft Skill Training – ME 1st year	12-09-2018	Mr. Tapas Mukherjee, Target Education	Enhancement of soft skills
Soft Skill Training - EE 1st year Sec B	07-09-2018	Mr. Tapas Mukherjee, Target Education	Enhancement of soft skills
Soft Skill Training – EE 1st year Sec A	06-09-2018	Mr. Tapas Mukherjee, Target Education	Enhancement of soft skills
Soft Skill Training - CE 1st year	05-09-2018	Mr. Tapas Mukherjee, Target Education	Enhancement of soft skills
Soft Skill Training - ECE 1st yearSec B	04-09-2018	Mr. Tapas Mukherjee,Target Education	Enhancement of soft skills
Soft Skill Training - ECE 1st year Sec A	03-09-2018	Mr. Tapas Mukherjee, Target Education	Enhancement of soft skills
Soft Skill Training – CSE 1st year Sec B	29-08-2018	Mr. Tapas Mukherjee, Target Education	Enhancement of soft skills
Soft Skill Training -CSE 1st year Sec A	27-08-2018	Mr. Tapas Mukherjee, Target Education	Enhancement of soft skills
Soft Skill Training - MCA and M.Tech	16-07-2018	Mr. Madhusudan Dutta, Avteg Pvt. Ltd	Enhancement of soft skills
Soft Skill Training – EIE 3rd year	13-07-2018	Mr. Madhusudan Dutta, Avteg Pvt. Ltd	Enhancement of soft skills
Soft Skill Training – IT 3rd year	12-07-2018	Mr. Madhusudan Dutta, Avteg Pvt. Ltd	Enhancement of soft skills
Soft Skill Training – ME 3rd year	11-07-2018	Mr. Madhusudan Dutta, Avteg Pvt. Ltd	Enhancement of soft skills
Soft Skill Training – EE 3rd year Sec B	10-07-2018	Mr. Madhusudan Dutta, Avteg Pvt. Ltd	Enhancement of soft skills
Soft Skill Training – EE 3rd year Sec A	09-07-2018	Mr. Madhusudan Dutta, Avteg Pvt. Ltd	Enhancement of soft skills

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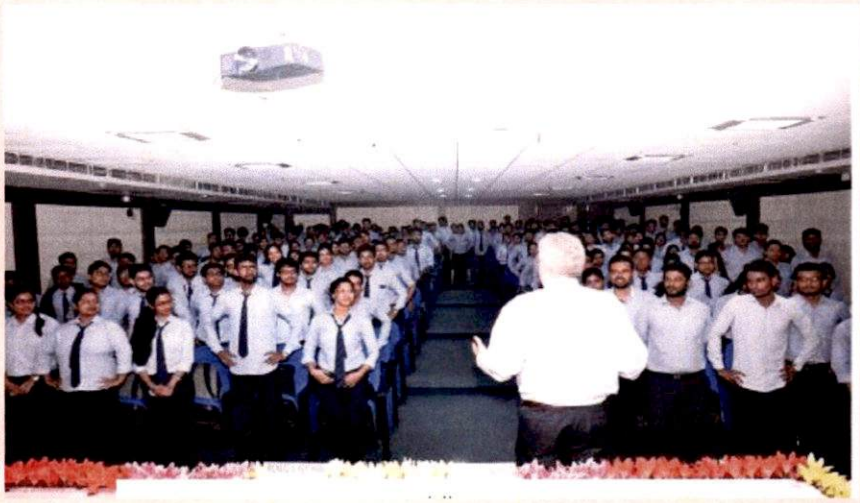
Soft Skill Training – CE 3rd year	06-07-2018	Mr. Madhusudan Dutta, Avteg Pvt. Ltd	Enhancement of soft skills
Soft Skill Training – ECE 3rd yearSec B	05-07-2018	Mr. Madhusudan Dutta, Avteg Pvt. Ltd	Enhancement of soft skills
Soft Skill Training – ECE 3rd yearSec A	04-07-2018	Mr. Madhusudan Dutta, Avteg Pvt. Ltd	Enhancement of soft skills
Soft Skill Training – CSE 3rd year Sec B	03-07-2018	Mr. Madhusudan Dutta, Avteg Pvt. Ltd	Enhancement of soft skills
Soft Skill Training -CSE 3rd year Sec A	02-07-2018	Mr. Madhusudan Dutta, Avteg Pvt. Ltd	Enhancement of soft skills



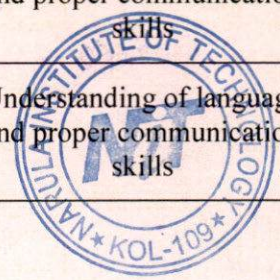
Soft Skill Training CSE (B. TECH) conducted on 03-07-18

Soft Skill Training EIE (B. TECH) conducted on 13-07-18

Language and Communication Skills

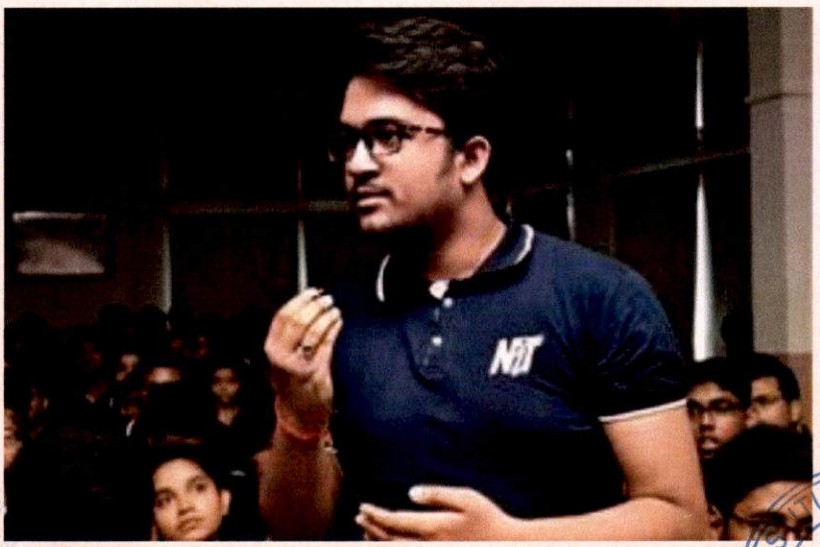
Language is considered the best facilitator of communication and it is also considered hindrance in the way of communication. Training is provided to students so as grooming can be done on several areas like the importance of proper communication, types of communication, barriers to communication, presentation skills etc. Distinguished experts from academics and industry deliver sessions on these topics that help the students to become prepared as per the need of the industry.

Name of the capability enhancement program	Date	Name of the agencies/ consultants	Objective
Workshop on Interpersonal Skills- ECE 1st year Sec B	02-05-2019	Ms. Rajasi Ray, Ms. Sharmistha Basu, Narula Institute of Technology	Understanding of language and proper communication skills
Workshop on Interpersonal Skills- ECE 1st year Sec A	09-04-2019	Ms. Rajasi Ray, Ms. Sharmistha Basu, Narula Institute of Technology	Understanding of language and proper communication skills
Workshop on Interpersonal Skills- CSE 1st year Sec A	11-03-2019	Ms. Rajasi Ray, Ms. Sharmistha Basu, Narula Institute of Technology	Understanding of language and proper communication skills
Workshop on Interpersonal Skills- CSE 1st year Sec B	28-02-2019	Ms. Rajasi Ray, Ms. Sharmistha Basu, Narula Institute of Technology	Understanding of language and proper communication skills
Workshop on Interpersonal Skills- IT 1st year	27-02-2019	Ms. Rajasi Ray, Ms. Sharmistha Basu, Narula Institute of Technology	Understanding of language and proper communication skills
Workshop on Interpersonal Skills- EE 1st year Sec B	22-02-2019	Ms. Rajasi Ray, Ms. Sharmistha Basu, Narula Institute of Technology	Understanding of language and proper communication skills
Workshop on Interpersonal Skills- EE 1st year Sec A	21-02-2019	Ms. Rajasi Ray, Ms. Sharmistha Basu, Narula Institute of Technology	Understanding of language and proper communication skills
Workshop on Interpersonal Skills- CE 1st year	20-02-2019	Ms. Rajasi Ray, Ms. Sharmistha Basu, Narula Institute of Technology	Understanding of language and proper communication skills



Workshop on Interpersonal Skills- EIE 1st year	19-02-2019	Ms. Rajasi Ray, Ms. Sharmistha Basu, Narula Institute of Technology	Understanding of language and proper communication skills
Workshop on Interpersonal Skills- ME 1st year	18-02-2019	Ms. Rajasi Ray, Ms. Sharmistha Basu, Narula Institute of Technology	Understanding of language and proper communication skills

Workshop on Interpersonal Skill CE (B. TECH) conducted on 04-11-19



Students participating actively in the Workshop on Interpersonal Skill

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Life Skills

Institute encourages yoga and meditation to enhance self-awareness, promoting physical and mental health of students and staff members. Yoga and Meditation increases self-esteem, reduces stress and lengthens attention span which can help a student to stay focused even during pandemic.

Name of the capability enhancement program	Date	Name of the agencies/consultants	Objective
International Yoga Day Celebration	21-06-2019	Mr. Peenaz Reza, Yoga Trainer	Enhancing physical and mental health
Blood Donation Camp	08-05-2019	NSS Unit, Narula Institute of Technology	Spreading awareness about health
Swachh Bharat Abhiyaan	07-09-2018	Mr. Peenaz Reza, Yoga Trainer	To understand the importance of cleanliness
Session on Yoga ME and IT	20-08-2018	Mr. Peenaz Reza, Yoga Trainer	Enhancing physical and mental health
Session on Yoga ECE -1st year	17-08-2018	Mr. Peenaz Reza, Yoga Trainer	Enhancing physical and mental health
Session on Yoga CSE -1st year	17-08-2018	Mr. Peenaz Reza, Yoga Trainer	Enhancing physical and mental health
Session on Yoga EE -1st year	16-08-2018	Mr. Peenaz Reza, Yoga Trainer	Enhancing physical and mental health
Session on Yoga EIE and CE -1st year	16-08-2018	Mr. Peenaz Reza, Yoga Trainer	Enhancing physical and mental health
Session on Yoga M.Tech and MCA	05-08-2018	Mr. Peenaz Reza, Yoga Trainer	Enhancing physical and mental health

Yoga Session conducted on 21-06-19

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Blood donation Camp

Blood donation camp was organized to make students aware about noble acts of humanity and make them responsible citizens

Active participation of students in blood donation camp conducted on 08-05-19

Swacch Bharat Abhiyan

Institute organized Swacch Bharat Abhiyan to make students learn the significance of cleanliness. They cleaned classrooms, hostels, college premises and adjoining areas.

Swachh Bharat Abhiyaan conducted on 07-09-18

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Trends in Technology

Technical seminars and workshops are conducted on regular basis for strengthening the knowledge of students about manufacturing practices in industry and the latest trend. Such programs are helpful to produce industry ready graduates.

Industrial visits are also conducted to provide an exposure to students about practical working environment. They also provide students a good opportunity to gain full awareness about industrial practices.

Name of the capability enhancement program	Date	Name of the agencies/consultants	Objective
Industrial Visit at MSME Tool Room	27-05-2019	Mr M Rama Rao,MSME Tool Room	To obtain knowledge about the practical implementation of the latest technology
Industrial Visit to PCS Electrical Pvt. Ltd	10-05-2019	Mr. Pintu Das,Supervisor, PCS Electrical Pvt. Ltd.	To obtain knowledge about the practical implementation of the latest technology
Industrial Visit at MSME Tool Room, Bonhooghly	03-05-2019	Mr. Santinath Mukhopadhyay, Asst. Director, MSME Tool Room, Bonhooghly	To obtain knowledge about the practical implementation of the latest technology
Industrial Visit to Hyper Xchange	02-05-2019	Hyper Xchange at Sector V, SaltLake	To obtain knowledge about the practical implementation of the latest technology
Industrial visit to Electrosteel Castings Limited	27-04-2019	Electrosteel Castings Limited	To obtain knowledge about the practical implementation of the latest technology
One day seminar on Recent trends in engineers and Industry expectation Industry: Role of fresh engineers and Industry expectations	25-04-2019	Kanu Gopal Pilsima, G.M. (Designand Engineering), Electrosteel Castings	Knowledge about recent trends in technology
		Dr. Biplab Chatterjee, Sr. Manager (GS), Air India Airport Sevices	Knowledge about recent trends in technology
Industrial Expert Lectures on Construction Methodology and safety measures	24-04-2019	Mr. Chandrachudha Bhattacharyya, Structural Consultant	Knowledge of construction methodology and safety measures
Industrial Visit to Mukesh Training Academy	11-04-2019	Mukesh Training Academy	To obtain knowledge about the practical implementation of the latest technology

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Industrial Visit to Central Room and Training CENTER, under Ministry of MSME	05-04-2019	MSME Tool Room (micro small andmedium enterprises)	To obtain knowledge about the practical implementation of the latest technology
Seminar on Arduino Based Embedded Systems and Robotics with IOT	03-04-2019	Ogmatech Lab	Arduino based embedded Systems and Robotics with IOT
National Seminar on Modern Trends of Electrical Engineering in Industry	28-03-2019	Mr. Sumit Chowdhuri, Advisory Board Member, Advisers India, Mr.Gopal Ghoshal, Senior Manager, CESC Limited	Knowledge of Modern Trends of Electrical Engineering in Industry
Seminar on Some Aspects of CMOS and VLSI CIRCUIT design	22-02-2019	Prof (Dr) J. K. Mondol, Kalyani University and Secretary of IETE Kolkata, Prof. (Dr.) S. K Sanyal, ECE Department Narula Institute of Technology and former Professor ofJadavpur University	Knowledge gain about some aspects of CMOS and VLSI CIRCUIT design
Industrial Visit at Gun and Shell Factory EE Group II	15-02-2019	Gun and Shell Factory, Cossipore	To obtain knowledge about the practical implementation of the latest technology
Industrial Visit to Gun andShell Factory EE Group I	14-02-2019	Gun and Shell Factory, Cossipore	To obtain knowledge about the practical implementation of the latest technology
Industrial Visit to GlobsynBusiness School	05-02-2019	Globsyn Business School, Sector V,Saltlake, Kolkata	To obtain knowledge about the practical implementation of the latest technology
Technical talk-session on Evolution of Switching in Telecommunication Systems	28-11-2018	Prof. Ashish Kumar Mukhopadhyay,Former Group Director, S.R Group of Institutions, Jhansi began	Enhancing the knowledge of Evolution of Switching in Telecommunication Systems
Workshop on Data Analysisand Machine Learning	08-11.2018 - 09-11-2018	Dr. Anupam Mukherjee co-founder of Domain Technology Orchestrator	Knowledge of Data Analysisand Machine Learning
Industrial Visit at SSR Enterprise	09-11-2018	Dr Sandip Chanda, Narula Institute of Technology	To obtain knowledge about the practical implementation of the latest technology

Industrial Visit on Chingrihata, Insdag- Site CEGroup II	02-11-2018	Mr. Debasish Dutta, AGMO, INSDAG,	To obtain knowledge about the practical implementation of the latest technology
Industrial Visit on Chingrihata, Insdag- Site SiteCE Group I	01-11-2018	Mr. Debasish Dutta, AGMO, INSDAG	To obtain knowledge about the practical implementation of the latest technology
Industrial Visit to Pixel Solutionz	29-10-2018	Pixel Solutionz, CG-170, CG Block, Sector II, Salt Lake City, Kolkata incollaboration with Ogma TechLab	To obtain knowledge about the practical implementation of the latest technology
Seminar on Stratosphere Communication	12-10-2018	Prof. (Dr.) J K Mandal, Kalyani University, Hony. Sec. IETE Kolkata	Knowledge of Stratosphere Communication
Industrial Visit to TCS Innovation Lab	07-09-2018	TCS Innovation Lab, Sector V, Salt Lake, Kolkata.	To obtain knowledge about the practical implementation of the latest technology
Industrial Visit to PCS Global	03-09-2018	PCS Global, DN 51 Merlin Infinite, Sector V, Kolkata	To obtain knowledge about the practical implementation of the latest technology
Industrial Visit to L and T- Electrical and Automation	24-08-2018	Avijit Dey, L and T-Electrical and Automation	To obtain knowledge about the practical implementation of the latest technology
Seminar on Key areas of Instrumentation domain	09-08-2018	Prof. Sunit Kumar Sen, Ex-Professor of University of Calcutta	Knowledge gain about key areas of instrumentation domain
The Overview of Core Industry	06-08-2018	Soumyajit Ghosh, Application Engineer, LUBI Electronics Pvt. Ltd	Knowledge enhancement about working of Core Industry
Industrial Visit to BSNL (Bharat Sanchar Nigam Ltd.)	27-07-2018	BSNL (Bharat Sanchar Nigam Ltd.),Salt-lake	To obtain knowledge about the Practical implementation of the latest technology
Workshop on Foundry Practice	12-07-2018 - 13-07-2018	Prof. P. K. Bardhan, JIS Collage of Engineering, Kalyani	Knowledge enhancement of FoundryPractice

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Seminar on Arduino Based Embedded Systems and Robotics with IOT

Industrial Visit to MSME Tool Room, Bonhooghly conducted on 05-04-19

Industrial Visit to BSNL, Bonhooghly conducted on 27-07-18

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3.1 M. O. U. (Period July 2018 - June 2019)

1. Narula Institute of Technology is selected as a Host Institute by MSME for carrying on the scheme "Support for Entrepreneurial and Managerial Development of SMEs through Incubators" in the 25th meeting of the Selection Committee held on 11th January 2018 at MSME New Delhi.

2. . Tech Mahindra and Narula Institute of Technology had entered into a memorandum of Understanding (MOU) with respect to the Principal technical and research areas of collaboration between Tech Mahindra and NIT around contemporary technology areas on 20/04/2017.

3. Infosys and Narula Institute of Technology had entered into a memorandum of Understanding (MOU) on 2nd March'2006 with respect to enriching the technical education process and to jointly work for enriching the quality of education imparted to students, faculty and management of selected colleges of the university related to the field of Information Technology.

4. National Association of Software & Services Companies (NASSCOM) for conducting the NASSCOM Apprenticeship Program (NAP), an integrated Apprenticeship Program on 15/12/2015

5. Asian Institute of Technology (AIT), Thailand, the collaboration aims to foster advancement in teaching training, research and cultural understanding as well as international reputation of both the institutions on16/03/2015 till date.

6. MOU with knowledge incubation for Technical Education Centre, Indian Institute of Technology, Kharagpur to improve quality of Technical Education through institutional and systemic reforms and boosts efforts to prepare more post-graduate students to reduce the shortage of qualified faculty, and to produce more Research & Development in Collaboration with industry on16/02/2015.

3.2 Alumni Activities

Trip down the Memory Lane

Students, present, and past both are vital and unique for an institution or university. It is common to lose track of most students after they proceed on their various careers, but tracking them all would be a huge task on any institution's part. But it is essential and urgent. they carry the institution's reputation, which relies in large part on how successful students are in the real world.

Alumni also help to maintain smooth running of the institute through funds, donations and volunteerism. We are pleased to have organised a wonderful and memorable 5th Alumni meet-Nostalgia, 2k18(A trip down the memory lane) on 22nd December, 2018 at Narula Institute of Technology, Agarpara, Kolkata. The date and time of the meet was informed and publicised through social media and beforehand preparations were made for the success of the meet. The gala event was started with a cake cutting ceremony by our Registrar madam, Ms. Nidhi Singh, Alumni Association President, Ms. Sagarika Chowdhury, Secretary, Mr. Abhijit Ghosh along with the Alumni, faculty members, office staff and student volunteers. The event was glittered by cultural performances done by our alumni students along with DJ Night where the students danced and enjoyed. Student volunteers also entertained Alumni by playing small games and asking them to share their college life. The alumni then had gala dinner where great bonhomie was observed everywhere with old students reliving their old memories with their batch mates, seniors and juniors. Many of the current students were also seen interacting with their pass out seniors and learning from their experiences. In all, the ambience was electric with people seen chatting and enjoying in groups. The Alumni showed their willingness to help and partner in various ways. The Meet ended with a sweet hope of Meeting again with the Alumni next year. NiT looks forward for a greater partnership with the Alumni in the days to come. Few glimpses of the event are attached herewith.

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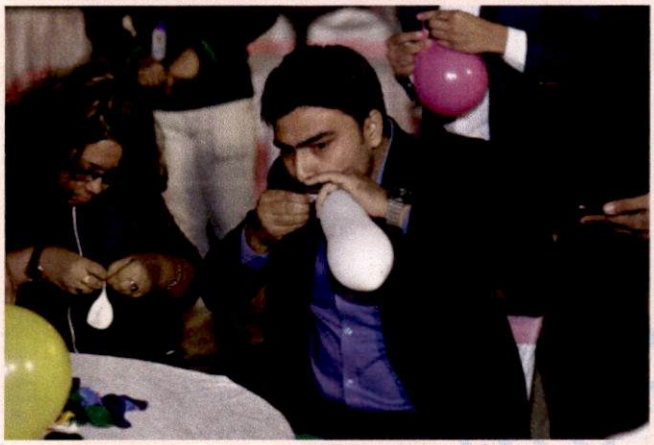

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3.3 INTERNATIONAL RELATIONS

EDUCAMP 2019 AT AIT BANGKOK, THAILAND

Each year students of JIS group of institutes visits the Asian Institute Of Technology, Bangkok. This was the sixth time of students of JIS group went to AIT Bangkok for 15 days internship training on the new technologies for development. Not only the internship, but also students have experienced a different things like food taste of Bangkok, cultural environment, sports culture and many more. So altogether that was "*Golden 15 days*" for all of them.

Learning:

Being an engineering student, students always try to learn something new and AIT gave them that chance. They have learnt new technologies which seems to them quite different. They want to share some of the new technologies, have experienced there.

1. **Map making using QGIS**: Using GIS we can plot any blank map in country wise, state wise or district wise using the datasheet. By doing this, a large area will be divided into smaller ones. They can also differentiate one state from another or one district from another by using different colour. For this reason, the data should be different for different parts. Thus we can plot different parameters like rainfall, agriculture, population density, literacy rate etc in which the data will be different for different parts.

   The below mentioned steps should be followed for the map making:

   - Install QGIS according to your desktop specification.
   - Import the .ship file according to your choice of country which is segregated into states or districts.
   - Import the .csv file or the data needed for your states or districts, which will be colour coded later on.
   - Join the .ship file with its corresponding .csv file.
   - From labels choose to show the name of the respective states or districts.
   - Go to symbology, choose the colour you want to code. Select quantize and graduated and increase number of colour levels click ok.
   - Now edit your map page with details like topic of the map, name of the creator, various scales, legends and a compass.
   - Save the file as .pdf and your map is functionally ready.

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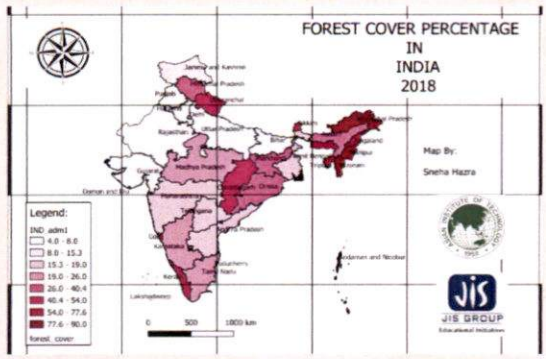

Mapping of Forest Coverage in India usin QGIS

2. **Showing the detailed information using Photodiode:** This technology is really a brilliant one. There is a machine which can observe the picture and can show the detailed information about the picture. The mechanism behind it is- At first light should be fallen on the picture. There is a photodiode in the machine which senses the light fallen on the picture, decodes it, demodulates and then shows the whole information which was stored already within it. This is a unique idea which we can use in different fields like especially in museum, we can apply to describe any picture and history behind it.

Students of JIS Group at Bangkok University for a Technical Session

3. **Treasure Hunt game using GPS tracking:** We all know about the fun game treasure hunt. But here we have used a new technology through the game. We have used a GPS tracker during the game. This GPS tracker can track the latitude and longitude of the location where the clue is present. When the value will be matched it means the clue will be around 3 meter distance from the displayed location. Using this technology we can easily track any object by its latitude and longitude.

4. **Drone:** Our students are really fortunate that we have learnt about the mechanism of drones. We have learnt about the mechanism how to fly a drone? The

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mechanism how we can make it? The mechanism how a drone can able to take a picture while flying? The mechanism how to control the drone? etc.

5. **Geoinformatics:** JIS group students have learnt about the remote sensing technology, global positioning systems, geographic information systems i.e. Geoinformation technology.

Prof.Nitin Kumar Tripathi in a technical session of Educamp 2019

Besides these we have learnt about the LiDAR Technology, Cloud Computing, Nanotechnology, Design Thinking, Robotics etc.

ACCOMODATION:

Campus of AIT is huge and beautiful, amazing infrastructure as well as great atmosphere. We must admit that AIT has been excellent host to us. They had looked after us and tried to cater to each and every need of the students as far as possible. The members of SU (Student Union) had taken the responsibility to allocate us rooms and also made us feel comfortable so that we do not feel out of place. Each of three students were allocated to a dorm and every student were given separate room with separate bed, cupboard, fan, table and chair to study. We were also provided the toiletries of daily use. There was separate dining space with dining table and chair so that we can feed ourselves late at night if we feel hungry and a balcony too. Three students each were allocated to

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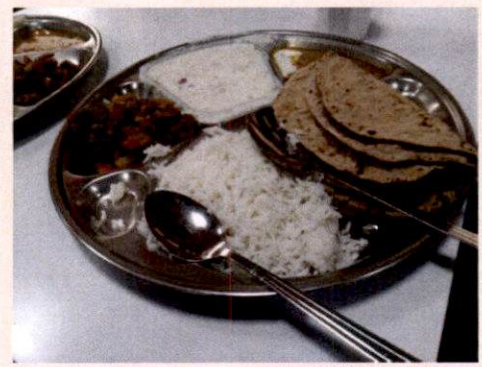
separate dorm located in "Student Village". Lush and green campus with a quiet and peaceful atmosphere. We can also hire bicycles to explore round the campus or to reach auditorium where we had to attend our lectures. Our teachers were provided air-conditioned rooms with more upgraded facilities. So, on a whole we lived a comfortable span of 15 days.

FOODING:

The AIT Cafeteria on campus serves Asian, Halal, Western, Thai, and Vegetarian dishes. It is open from 7:00 a.m. to 9:30 p.m. SU Snack food is open from 8:00 a.m. to 11:00 p.m. There are also a number of coffee shops in different academic buildings which are open during office hours, from 7:30 a.m. to 4:30 p.m. and Kiosk shops available for specific types of food around the campus which are open till 8:30 p.m. We have also convenience stores (Lawson 108 and 7-Eleven) which are open 24 hours a day and you can find processed foods like burgers, chips, cup noodles, chocolates etc. Students, however, should not always expect to be able to obtain food of exactly the kind they are used to.



During the seminars we had tea breaks we were provided with varieties of cakes, biscuits and refreshments. During lunch and dinner, we were provided normal Indian food which we were used to have. During our outings such as in night market and Asiatique we were able to explore a lot of thai foods such as Tom-Yum-Kung, BBQ squid, cheese and salmon balls, different types of sushi thai fried rice and a lot more which were a quite different experience to us.

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OUTING:

In our AIT tour we visited Night market, Thammasat University, Safari world, Bangkok National Museum, Bang Pa-In Royal Palace, Asiatique the Riverfront, Future Park, MBK Center (Ma Boong Khron Center), Ayutthaya-Ancient Capital of Thailand.

Night Market: AIT Night market is one of the biggest attraction for tourist. It is the best place where you can get chipset items to buy and test Thai foods. You can find night market only on Monday and Wednesday.

Bangkok National Museum: The Bangkok National Museum is the main branch museum of the National Museums in Thailand and also one of the largest museums in Southeast Asia. It is the best place where you can visualised the current technology. The entire museum divided into three parts and each and every parts have their own attraction.

Asiatique The Riverfront, Bangkok: Once an international port, Asiatique The Riverfront is now among the most happening night markets in Bangkok. Neatly divided into four districts, it houses a variety of options for visitors ranging from boutiques, fine dining, a mall, fashion stores and entertainment spaces. With the picturesque backdrop of the Chao Phraya River and a glittering skyline, the Asiatique makes for an exquisite experience in Bangkok.

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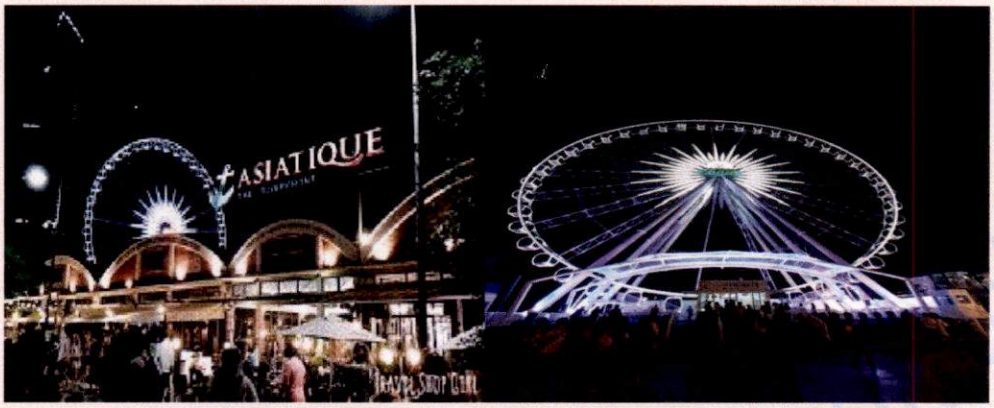
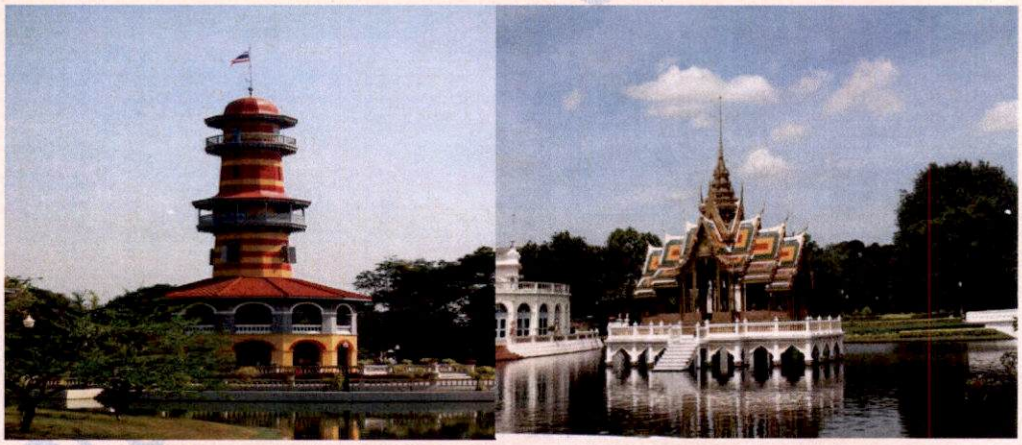


Bang Pa-In Royal Palace : Bang Pa-In Royal Palace is also known as the Summer Palace. It lies beside the Chao Phraya River in Bang Pa-in District, Phra Nakhon Si Ayutthaya Province. This place is also one of the attraction for tourist. This place consist of vast gardens and landscaping stand the following buildings: Wehart Chamrunt (Heavenly Light), a Chinese-style royal palace and throne room; the Warophat Phiman (Excellent and Shining Heavenly Abode), a royal residence; Ho Withun Thasana (Sages' Lookout), a brightly painted lookout tower; and the Aisawan Thiphya-Art (Divine Seat of Personal Freedom), a pavilion constructed in the middle of a pond.



Future Park: Future is one of the Asia's largest mall located on located on Phahonyothin Road in Pathum Thani. The mall houses are more than 70 restaurants and food outlets, eight major banks and financial institutions, a post office and outlets for all phone networks and mobile phone service providers.

MBK Center (Ma Boong Khron Center): MBK Center, also known as Mahboonkrong, is a large shopping mall in Bangkok, Thailand. At eight storeys, the center contains around 2,000 shops. If you love shopping and wants to buy branded clothes then it is the best place for you.

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Safari world: Safari World is a tourist attraction in Bangkok. We visited safari world on 10th June but a single day was not enough to visit whole park. In this park there is many more species to see, we get a chance to feed giraffe, birds etc. The biggest attraction of Safari world is Dolphin show, Orangutan show, Sea lion show, birds show etc.

SPORTS:

The sports facility provided at AIT, Bangkok is very good. The students there do have television and other stuff but rather they are provided with outdoor as well as indoor sports facility like Soccer, Table Tennis, Badminton, Basketball, Squats, Lawn Tennis and Swimming. During our visit of AIT, Bangkok the administration arranged a Badminton tournament for the interested students who wanted to play. There are also some glimpses of that evening as shown below

There was separate men's and women's Badminton tournament and there was a huge amount of participation as well as competition in the tournament.

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The students were also allowed to indulge in other kinds of sports activities like playing Table Tennis or Basketball. The people there were very nice and allowed us to use their equipment to play and they also played with us.

The teachers also played with us in the Badminton tournament and there was medal distribution for the winners and runner ups too.

Saborni Dutta also won the first prize in women's Badminton Tournament.

CULTURAL DAY - Celebrating our differences & common interests

Culture is the characteristics of a particular group of people, defined by everything from language, religion, cuisine, social habits, music and arts. It is the total way of life that people in the society are blessed with.

On the 13th day in our fifteen days international internship at **Asian Institute of Technology (AIT), Thailand** we celebrated the cultural day.

Institute of Technology
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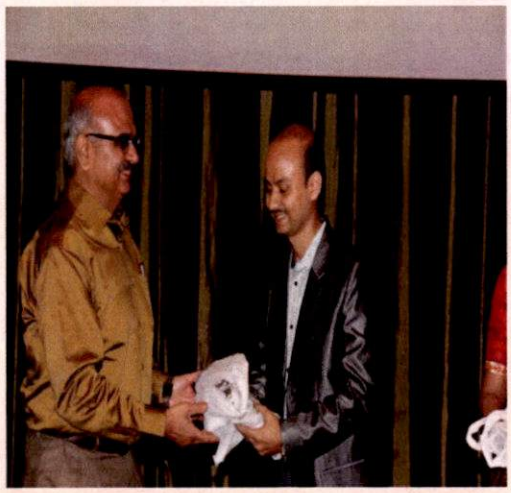
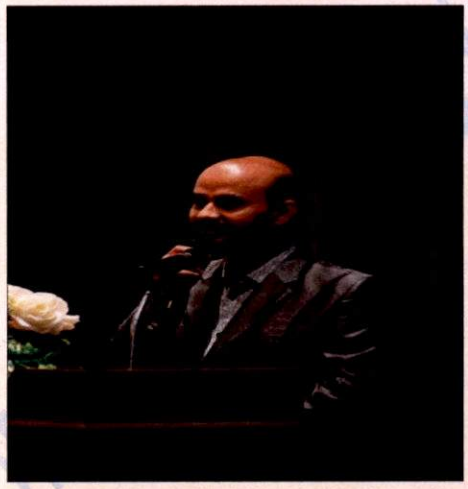
Our students were given a platform to represent our culture. We got a chance to represent our country India. A program was arranged by the management of AIT in the evening inside the campus. The program was conducted by us i.e. the students. The evening started with a "Vedmantra". *Students performing "Vedmantra"*

Then our respected teachers delivered their valuable speeches.

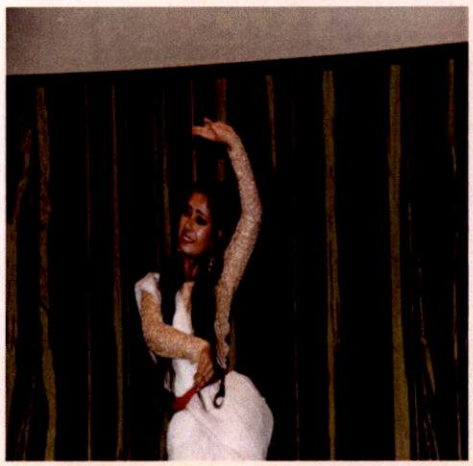


Receiving gift from Prof.N.K.Tripathi



In a speech at AIT, Bagkok

Then the program followed by some dancing & singing performances. We conducted the whole program, took part in it & fully enjoyed the beautiful evening although.



Students singing song & performing dance

Some students of Taiwan were also present there. They also performed & enjoyed the program. We ended our cultural event with our National Anthem "*Jana gana mana*".

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Chapter 4 ..... INFRASTRUCTURE

4.1 CENTRE OF EXCELLENCE (COE) FOR INNOVATION ECOSYSTEM

NIT has created the Centre of Excellence (CoE) for Innovation Ecosystem harnessing talents in some of its potential areas. This centre will cater to the growing needs and potentials of the students involved in higher education by providing them tools, methodologies and support for exciting research opportunities. This is not going to be department specific but interdisciplinary ventures which thus are going to create entrepreneurial avenues leading to employment generation rater than mere job seekers.

In this centre of excellence, we aim

1. To harness the potential of technological advances to solve the existing socio-economic and environmental problems.
2. To turn the digital divide into a digital opportunity for all through functionality driven low-cost hardware design.
3. To develop a fertile ground for learners, developers, contributors, entrepreneurs and decision- makers. To work in the direction of building an inclusive society with the participation of Government, Private Sector and International Organizations.

The Innovation Ecosystem Center of NIT Agrapara seeks to provide continuous momentum towards promoting innovation in entrepreneurship. Narula Institute of technology shall be an academic incubator and provide support to those business ideas which are elaborated by the students that addresses the unattended issues persisting in our society. It aims at providing a platform to young talented students, where they can bring forward their ideas in the space of science and engineering and showcase the same to industry experts to get their assistance in developing a model. It intends to nurture young minds and help their ideas gain ground through channelized guidance and mentorship by industry experts. We wish to give engineering students and industry practitioners an opportunity to interact and build a community that looks into the future.

I. NiT Centre of Excellence(CoE)team has organized a 3 days workshop on "Innovation The New Knowledge Mantra" for the budding Technopreneurs from 18th-20th September,2018.

The Aim of this workshop is to inspire and develop entrepreneurship skills among students and to give more and more successful entrepreneurs to the society. This workshop included speeches from

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eminent speakers, training on entrepreneurial skills development and sharing of experience with first generation entrepreneurs.

The key speakers of the 3 days workshop were:

Mr. Tushar Garg, Head, Business Development, National Innovation Foundation(NIF),India.

Dr. Subhadra Dravida, Founder and CEO,Transcell Biologics Pvt. Ltd.

Dr. Abhishek Vaish,Assistant Professor, IIIT, Allahabad

Mr. Subrata Sen, Former Associate Vice president, AVP.

Mr. Kunal Chanda, Senior Engineer, CDAC, Kolkata.

Ms. Nilanjana Mukherjee, CEO, Universal Group

Mr. Ashwin Shastry , President, BlueInd Consulting Services

Mr. Ramakrishna S, Co-Founder, BlueInd Consulting Services

Ms. Tejasri Pingali, HR Business Partner,BlueInd Consulting Services.

It was a great learning experience for faculties and students alike.

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II. Under the initiative taken from the NiT CoE team 8 members; 6 students along with 2 mentors, Students Participants: Sayantan Mitra, Supravat Roy, Uday Sankar Saha, Avipsa Basak from EIE department and Srijita Dutta, Ramrick Ganguly from Business Administration Department with Mentors: Kaushik Sarkar from ECE and Susmita Das from EIE participated in the INNOMPIC Games 2018 which was a platform where the students were given a chance to show their technical efficiency and skills to develop innovative business model to grow as an entrepreneur which is called the "Global Innovation Acceleration". Team NIT is the winner in the category of "Creative Problem Solving" in the 2nd INNOMPIC Games 2018, held at University of Kuala Lumpur, Malaysia from 27th September-30th September, 2018, by defeating the global competitors like Vietnam, Malaysia, Uzbekistan,Russia and another team from India. Most importantly they have defeated the winner team (Russia) of previous year. Furthermore, our students won some other awards also in different categories such as :

Best Ideator : Ramrick Ganguly

Mr. Innovator : Supravat Roy Ms.

Innovator : Avipsa Basak

Wittiest Innovator : Uday Sankar Saha

The jury members were from Belgium, Croatia, Germany, India, Malaysia, Russia, Singapore, USA and Vietnam.

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III. Another laurel achieved under the flagship of JIS Group is the Inauguration of JIS Bosch Rexroth Centre of Excellence was inaugurated on the 11th of March 2019. JIS Group has always been the forerunner in academics and to keep in pace with the changing technological advancement in the world of hydraulic and pneumatic systems, it has collaborated with Bosch-Rexroth of Germany, pioneers in this domain to culminate that dream into the making of the Centre of Excellence with research and training facilities.

The program was graced by the Chief Guest, Dr. Michael Feiner, Consul General, Consulate General of the Federal Republic of Germany, Kolkata and Mr. Dhirendra Gandhi, General Manager- Bosch Rexroth India Limited. Shri Taranjit Singh, Managing Director-JIS Group , Shri Amanjot Singh, Director- JIS Group and Dr. (Prof). Maitreyi Ray Kanjilal, Principal, Narula Institute of Technology were also present.

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MAJOR INNOVATIVE DRIVES BY STUDENTS

1. CSE 2nd year students have designed an Automatic Writing Machine called CNC Machine (Computer numerical control). CNC machine is an unique and versatile form of soft automation and was advanced to control the motion as well as an operation of device tools.

2. Sensor Integration going at the Disaster Management Project at IOT Lab, Department of Computer Applications.

3. Python Turtle Graphics Programming for Textile Pattern Generation going at Python Lab, Department of Computer Applications.

4. Project title Arduino Based Restaurant Menu Ordering System
   Group members - 1) Amritendu Saha ECE
   2) Madhuparna DasECE
   3) Satyam Kumar ECE
   4) Kumar SatyamECE
   Mentor - Prof. Pranab Hazra

5. Students of EIE Third year have developed a Mini project on " Online Energy meter Monitoring System". The team members are Raktim Pratihar, Arka Majumdar, Atmadip Dey, Kaustav Roy, Debdip Chakraborty, Kumar Harshit Singh.
   They have developed the Energy meter-monitor which is controlled by IOT. This project gives us the monitored value of our Energy meter that will be provided by the current distributor. This project gives the data of total wattage use and the costing of the total watt. From our website or mobile app, user can able to monitor the data from anywhere in the world. The Project has been hugely appreciated by the Expert Professor of Calcutta University who has examined the project.

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6. : EIE Third year Mini project "Smart traffic management using ultrasonic sensor " has been developed by Sukhman Kaur, Varun Sureka , Samir Ghosh, Sougata Nag and Ayush Choudhary . Smart Traffic Management is a system where centrally-controlled traffic signals and sensors regulate the flow of traffic through the city in response to demand.In this project we use ultrasonic sensors to meausure the density of the traffic and it accordingly switches the lights from red to yellow followed by green They have published the work in National Conference FOSET 2019.The project has been developed under the supervision of Ms. Anita Biswas, Faculty of Dept of Electronics and Instrumentation Engineering, Narula Institute of Technology.

7. EIE Final year project " Home Automation system for elderly people" has been developed by Sagar Gupta, Aritra Basu, Rishab Roy, Trinanjana Dey, Kushal Bhowmick and Prit Singh. They have developed a working prototype model of home automation system capable of monitoring various parameters of elderly people along with physical parameters of home. The prototype is IOT enabled so, any person can remotely monitor the security parameters of the home. They have published the work in National Conference FOSET 2019.The project has been developed under the supervision of Mrs. Bansari Deb Majumder, HOD of Dept of Electronics and Instrumentation Engineering, Narula Institute of Technology.

8. EIE Final year students Pritha majumder, Anshuman Bhowmick and Sukanya Roy has developed a project on "MQ3 alcohol sensor based ignition controller" where a alcohol sensor is used to detect the alcohol level of the driver it will show the result in the display and through the relay the ignition will stop so that so many accident can be decrease easily and through the gsm module the owner of the car or someone from the family will informed. There is a servo motor through which if any of the door of that particular car ignition will not start. This project totally IOT enabled and it is published in National Conference FOSET 2019. They have developed the project under the supervision of Mrs.Bansari Deb Majumder, Head of the Department of Electronics and Instrumentation Engineering, Narula Institute of Technology.

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4.2 DEPARTMENTAL LAB DETAILS

Dept Name	Lab Name	Name Of Equipements/ Software	Brief Description
CSE	316K	1. 33 HCL version PC Processor: Intel Core 2 duo E7500@ 2.93 GHz, 1066 MHz FSB, 3 MB L2 cache, Memory:1 GB DDR2 800MHz, Chipset: Intel G41, 250 GB SATA HDD, 22X DVD Writer, 15.6" TFT Monitor, HCL Multimedia Keyboard, HCL Optical Scroll Mouse 2. 1 CISCO Catalyst 2950 Network Switch.	Programming Lab
	316L	1. 34 ACER VERITON PC WITH INTEL PENTIUM G640 2.8 GHz PROCESSOR, 2 GB RAM, 500 GB HDD, 18.5" TFT Monitor. 2. 1 ACER VERITON (with altered parts) PC with E7500 PROCESSOR, 1 GB RAM, 250 GB HDD, 18.5" TFT Monitor. 3. CISCO Catalyst 2950 Network Switch.	Networking and Operating System Lab
	316O	1. 30 HCL version PC Processor: Intel Core 2 duo E7500@ 2.93 GHz, 1066 MHz FSB, 3 MB L2 cache, Memory: 1 GB DDR2 800 MHz, Chipset: Intel G41, 250 GB SATA HDD, 22X DVD Writer, 15.6" TFT Monitor, HCL Multimedia Keyboard, HCL Optical Scroll Mouse 2. 1 CISCO Catalyst 2950 Network Switch.	Object Technology Lab
	316F	1) HP Computer Set -31 Nos Intel Core 2 Duo 2.93 Hz G31 chipset MB 160 GB HDD 1 GB DDR2 RAM DVD RW,15.6" Monitor 2) HCL Computer Set-3Nos Intel core2 Duo 2.93Hz G41 Chipset MB 250 GB SATA HDD 15.6" Monitor 3) Edge Switch-1 No Cisco Make[Catalyst2950]	DBMS Lab
	316H	1) Wipro Computer Set -1 Nos CPU E7500 Intel Core 2 Duo 2.93 Hz G41 chipset MB 320 GB HDD	Programming Lab

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		1 GB DDR3RAM 19" TFT Monitor 2) Dell Computer Set-32 Nos CPU i3-4160T 3.10 GHZ 500 GB HDD 4GB RAM Dell TFL Monitor 3) Edge Switch-1 No Cisco Make[Catalyst2950]	
	316R	1) HCL Computer set (Desktop PC): Processor: AMD ALTHMONG 3800 plus processor Memory: 2 GB RAM Chipset: MSI Motherboard, 120 GB HDD, 16x DVD HCL Multimedia Keyboard, HCL Optical Scroll Mouse, 15" TFT HCL Monitor 2) Network Switch: 2 nos 16 port NET GEAR 24 port ZYXEL 1 VALRACK 2 patch panel Structured cabin I/O Box: 34 nos D-Link DCEIOSMxxxxxx Information Outlet Cat sc Single	M. Tech Lab
EIE	**INDUSTRIAL INSTRUMENTATION LAB**	1. Flow Meters: Orrifice,Differential Transmeter 2. Capacitive Level Transmitter 3. Buffle Furnace 4.Viscosity Measurement 5.Moisture Measurement 6.6 1/2 Digit Multimeters, Digital Storage Oscilloscope	Buffle Furnace, Moisture Measurement, Viscosity Measurement Can Be Performed In This Laboratory. Electronic Indicator Display Planels Are Attached To Every Industrial Setup. The Process Parameters Are Interfaced With The Personal Computers With National Instrument Based Data Aquisition Cards. Further Data Analysis Can Be Performed Using Ni Labview Software.

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EIE	**SENSORS AND TRANSDUCERS LAB**	1. National Instrumentation Data Acquisition Systems 2. Labview Software 3. Smart Sensors Like Ad590,Ldr, Load Cells,Capacitive Transducers, Lvtd 4.Digital Storage Oscilloscope, Multimeters, Function Generators	Sensors And Transducers Laboratory Is One Of The Sofisticated Laboratory Of Electronics And Instrumentation Department. The Laboratory Is Designed On The Concept Of Virtual Instrumentation. Measurement And Calibration Of Various Smart Sensors With Their Required Complete Setup Are Performed And The National Instrument Data Aquisition Cards Are Interfaced With Personal Computers. Data Analysis Is Performed By Labview Software Is Installed In The Personal Computers.
EIE	**MICROPROCESSORS AND MICROCONTROLLER LAB**	1. Microprocessors: 8085, 8086 With Periferals Like Servo Motors,Stepper Motors,Seven Segment Displays 2. Microcontrollers: 8051 With Periferals Like Servo Motors,Stepper Motors,Seven Segment Displays 7. Personal Computers	Led Module, 7-Segment Display Module, Stepper Motor & Servo Motor Module Etc Experiment Can Also Be Perfomed On Microcontrollers (8051) Which Are Interfaced With Peripherals Like Led Module, 7-Segment Display Module, Stepper Motor & Servo Motor Module Etc. In This Laboratory Several Microcontroller Based Projects Are Designed And Implemented
ME	**WORKSHOP**	Centre Lathe	4'-6" Bed length , Semi Norton type Centre Lathe. High precision semi automatic lathe.
		Drill Machine	25 mm Drilling Capacity
		Radial Drill Machine	25 mm capacity; Geared

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		Shaping Machine	12" stroke length; V- belt power transmission, 1.5 HP
		Universal Milling Machine	U.M.M having longitudinal feed of table automatic (30" 7")
		Power saw	6" dia cutting capacity
		Bench Grinding	73.33kw;50HZ;1.4 Amps
		Arc Welding Setup	350A; 40-60V
		Spot welding setup	Resistance Welding
		MIG welding setup	MIG 250

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Dept Name	Lab Name	Name Of Equipements/Software	Brief Description
ME	MANUFACTURING PROCESS I	Sand Rammer	Preparation of Moulding Sand Kelsons
		Compression Machine	Compressibility test of moulding Sand Kelsons
		Permeability test	Permeability test of Moulding Sand Versatile Equipment
	IC ENGINE	Bomb Calorimeter	Capacity of bomb calorimeter-650cc,working pressure-200atm.
		Multicylinder Petrol Engine	ISUZU make, four stroke,four cylinder automotive petrol engine developing 10 BHP at 2000 rpm.
		Catalytic Converter	Ribbed body OEM heat shield catalytic converter with honey comb catalyst.
		MPFI system	Self started MPFI engine system with ECM box circuit.
		Electric Dynamometer	Type AV1, Bore: 87.5 mm, Stroke: 110 mm, R.P.M: 1500, BHP: 5, Lub oil Capacity: 3.7 ltr
		Valve timing diagram Study apparatus	
	REFRIGERATION & AIR-CONDITIONING	Capacity of bomb calorimeter-650cc,working pressure-200atm.	Finned tube air cooled condenser with fan & thermostatic expansion valve, refrigerant – R134a.
		ISUZU make, four stroke,four cylinder automotive petrol engine developing 10 BHP at 2000 rpm.	43 Litrs, forced convection type with semi conductor MS & fibre cooler.
		Ribbed body OEM heat shield catalytic converter with honey comb catalyst.	Compressor- using refrigerant R-134a,Finned tube-200x200mm.

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ME	**FLUID MECHANICS LAB**	Determination of Hydraulic co efficient	Dia 10mm orifice Measuring tank 0.5*0.4*0.3mm
		Calibration of orifice and venturimeter	Venturimeter: Inlet dia 20mm, throat 10mm Oriffice meter inlet dia 20 mm Vena contracta 10 mm
		V-Notch	Rectangular notch// Tringular V 90 degree
		Centrifugal pump	1 HP; 300*400*400mm tank
		Reciprocating Pump	Casing:Stainless steel; Runner: Cast Bronze Shaft: Stainless steel Rated Supply: 40 meters ; Discharge 400 rpm, Normal Speed 1000 rpm
		Pelton turbine	Spiral Casing Cast Iron Runner Bronze; Guide Vane Mechanism Plated EN 8 Steel
		Francis Turbine	Size 50X15 Area ratio: 0.35 Venturimeter: Inlet dia 40 mm Throat dia 23.66 mm
		Hydraulic RAM Test RIG (Closed Circuit)	Two cylinders with 45 cm height and dia 15 cm. With nine pipes attached and dia 10 mm
		To verify Bernoulli's theorem	Weight carried 4.25kg
		Metacentric height of a floating vessel	Casing:Stainless steel; Runner: Cast Bronze Shaft: Stainless steelRated Supply: 40 meters ;

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			Discharge 400 rpm, Normal Speed 1000 rpm
	HEAT TRANSFER	Double stage air compressor test RIG	Double cylinder double stage with displacement of about 250 LPM and to work again a max pressure of 10 kg/sq. cm
		Combine throttling and separating calorimeter	Boiler delivering a continuous flow of steam at min pressure of $4kg/cm^2$ Size: 525 mm X 450 mm height
		Thermal conductivity of metal bar testing set up	Metal bar- dia: 25 mm with 8 thermocouple
		Thermal conductivity of insulating powder	Inner sphere dia: 100 mm And Outter sphere dia: 200 mm
		Equipment for heat transfer from pin fin	Chanel 150 mm X 100mm X 1000 mm with three fins of MS brass and Al
		Emissivity measurement apparatus	Test plate and black plate- 160 mm dia each,
		Parallel flow and counter flow heat exchanger	Inner Cu tube- I.D 12.7 mm and outer G.I pipe – I.D 15 mm and 1.5 m length, capacity of geyser 3kN
	ADVANCE MANUFACTURING	6 Axis Robot	Axis 6 Nos Link l 300 mm Link 2 300 mm Timing belt drive Proximity Switch 50kg 500mm/min 1kg
	MATERIAL TESTING LAB	Universal testing machine with accessories	Loading unit with 1 jaw set for the range 10-25 dia Connection pipes (kept inside the control unit)

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		Impact testing Machine	For IZOD and Charpy test capacity 170 and 300 Joules respectively , Model PMT 8
		Torsion Testing Machine	For rods Capacity 50 Kg meter, Model PMT 9d Loading unit with Gear box
		Closely Coiled Helical Spring testing Machine	Capacity 200 kg manually operated for tension & compression of Helical spring
		Fatigue testing machine	Max bending moment 200-400 kg cm, Testing dia-8mm, length - 226mm,rotating speed-4200 rpm,
	HEAT TREATMENT FURNACE	To change the material property of a material	Temperature Range:1000°C / 1200 Deg.C. Supply : 230V Ac, 50 Hz, Single Phase.
	THERMAL POWER ENGINEERING LAB	Vertical water tube boiler	Study of Vertical water tube boiler
		Vertical fire tube boiler (Cochran)	Study of Vertical fire tube boiler (Cochran
		Horizontal fire tube boiler (Lancashire)	Study of Horizontal fire tube boiler (Lancashire)
		Flash and fire point of diesel and lubrication oil.	Cleveland Apparatus (Open system)
		4-Stroke diesel engine	Determination of BP, IP and FP at different load Single cylinder, water cooled, developing 5 H.P at 1500 rpm
		4-Stroke petrol engine	Determination of BP, IP and FP at different loadDisplacement-197cc Engine Oil Capacity-0.7 Engine Type-Single Cylinder, 4-

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			Stroke, SV, Air cooled Fuel-Petrol / Kerosene Max. Output-4.0 HP Fuel Tank Capacity (L)- 0.4 / 3.9.
		Bomb Calorimeter	Determination of calorific value of fuel Capacity of bomb calorimeter-650cc,working pressure-200atm.
		Bomb Calorimeter	Determination of calorific value of fuel Capacity of bomb calorimeter-650cc,working pressure-200atm.
		4-Stroke diesel engine with electrical load brake	Determination of BP, IP and FP at different load Single cylinder, water cooled, developing 5 H.P at 1500 rpm,Loading Device –coupled with 3.0 KW DC single phase wire wound rheostat.
		4-Stroke diesel engine(Model)	Study of 4-Stroke diesel engine(Model)
		4-Stroke petrol engine(Model)	Study of 4-Stroke diesel engine(Model)
		2-Stroke petrol engine (Model)	Study of 2-Stroke petrol engine (Model)
	Basic Electronics Engineering Laboratory	Each of the benches are fully equipped with: Signal sources Power supply Measuring instruments like digital multimeter, C.R.O etc.	Well designed laboratory manual / instruction sheets are provided to students at the beginning of the session for a particular lab. Laboratory is maintained and conducted by well trained technical supporting staff under the supervision of the faculty members. Most of the technical staffs have undergone first aid and fire fighting training.

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	Digital Electronics Circuit Laboratory	C.R.O 25 MHZ..Dual Trace Function Generator. 1 MHZ. Power Supply.(0 ---30V, +12 –0 -- - 12v. +5volt). Multimeter. (0 ---20M ohm, 0-1000 DC Volt, 0--700A.C volt, 20micro 10 Amp.) IC Tester (Digital and Linear)	This lab is used for 2nd year of Electrical, EIE and IT Students in Odd semester and in Even Semester is used for 2nd year ECE students. Approximate area of this Lab is 2000 Sq.ft and its location at 2nd floor.room no-312 A.
	Analog Electronic Circuits Laboratory	Function generator(4MHz,30Vp-p) Power supply 2- channel(0-30V), 3A with maximum current control facility,1 channel fixed 5V, 3A Cathode Ray oscilloscope 2-Channel, 30MHz. Measuring instruments like advanced digital multimeter, LCR meter etc. Facilities of soldering and disordering, and other testing equi pments like DSO, Power meter etc are there which are mainly used for project and some innovative experi ments. Digital Storage Oscilloscope (100 MHz)	Analog Electronic Circuits laboratory is situated 2nd floor, room no. 312B.Geometric area of this lab is about 1250 square feet. According to present curriculum B-Tech (ECE) 4th Semester Students perform experiments on Analog Electronic Circuits Laboratory
	Analog Communication Laboratory	Signal Generator (Direct Digital Synthesis Signal Generator), 3MHz, 1 Channel, Output Voltage ± 20Vpp in 50Ω Load. 10MHz – Modulation Function-Pulse Generator, Output Voltage ± 20Vpp in 50Ω Load.	Lab used in 5th semesters, Student of ECE departments are using this lab, Approximate area of the lab is 1250sq ft, Location of the lab is 2nd Floor and Room No-310B, Average no of student per session 30 to 35, No of setup available is 8, No of students per

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		Cathode Ray Oscilloscope (CRO), 100MHz, 2 Channels, 4 Trace Cathode Ray Oscilloscope (CRO), 50MHz, 2 Channels, 4 Trace Digital Storage Oscilloscope (DSO), 50MHz, 2 Channels, 4 Trace, 250MSa/s Real-Time and 25GSa/s Equivalent-Time Sampling Digital Storage Oscilloscope (DSO), 100MHz, 2 Channels, 4 Trace, Real-Time Sample Rate 1.0SG/s Spectrum Analyser Frequency Range: 150KHz to 1050MHz 4½ Digit Display: Centre & Marker Frequency, 0.1MHz Resolution Amplitude Range : -100dBm to +13dBm Filters : 20KHz, 400KHz & Video Filter AM /FM Demodulator Included Full Range Built-in Tracking Generator : 0.15MHz to 1050MHz. Multiple Power Supply, A : 0-30 V, 1 A continuously variable by means of coarse & fine controls, 5 V, 1 A Adjustable from 4 V - 6 V, 0 - ± 15 V, 1 A adjustable by means of coarse & fine controls Major Equipment: Digital Storage Oscilloscope (DSO), 50MHz, 2 Channels, 4 Trace, 250MSa/s Real-Time and 25GSa/s Equivalent-Time Sampling Digital Storage Oscilloscope (DSO), 100MHz, 2 Channels, 4 Trace, Real-Time Sample Rate 1.0SG/s Spectrum Analyser Frequency Range: 150KHz to 1050MHz 4½ Digit Display: Centre & Marker Frequency,	setup is 4.

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		0.1MHz Resolution Amplitude Range: -100dBm to +13dBm Filters : 20KHz, 400KHz & Video Filter AM /FM Demodulator Included Full Range Built-in Tracking Generator : 0.15MHz to 1050MHz.	
	Microprocessor and microcontroller Lab	8085 Microprocessor Trainer Kit. Technology NMOS, Frequency, 3MHz. 8051 Microcontroller Kit, 12MHz, 32bit Seven Segment Display interface With Microprocessor. DC Motor Interface VMC 8501 StepperMotor Interface VMC 8501 Hex Keyboard Interface Normal Switch LED Buzzer Interface. C.R.O 25MHz, and 50MHz 4 trace, 2-ch oscilloscope Function generator 1 MHz , mplitude with -20db attenuation 100mv ~1v Simulator using pc	This lab is used for ODD Semester EE 3rd Year and ECE 3rd Year its Approximation Area is 1800 sq. ft . and Location at 2nd floor Room no – 311. Generally we are Conducting the Lab,Average of student per Session is 30 nos. and Experimental Setup is 8 nos.
	Digital Signal Processing Laboratory	Desktop PCs with LAN connection. DSP Starter Kit TMS320C5416 (Texus Instruments) DSP Starter Kit, TMS320C6713 (Texus Instruments) MATLAB 7.0.1 (Math works)	Digital Signal Processing laboratory is situated 2nd floor, room no. 316B.Geometric area of this lab is about 900 square feet. According to present curriculum B-Tech (ECE) 6th Semester Students perform experiments on Digital Signal Processing Laboratory.Digital Signal Processing (DSP) Laboratory can

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			be described as the processing of signals using digital techniques or digital computers.
	Digital Communication Laboratory	Digital Storage Oscilloscope (DSO), 50MHz, 2 Channels, 4 Trace, 250MSa/s Real-Time and 25GSa/s Equivalent-Time Sampling Digital Storage Oscilloscope (DSO), 100MHz, 2 Channels, 4 Trace, Real-Time Sample Rate 1.0SG/s Spectrum Analyser Frequency Range: 150KHz to 1050MHz 4½ Digit Display: Centre & Marker Frequency, 0.1MHz Resolution Amplitude Range: -100dBm to +13dBm Filters : 20KHz, 400KHz & Video Filter AM /FM Demodulator Included Full Range Built-in Tracking Generator : 0.15MHz to 1050MHz.	This Lab is used in 6th semesters, Student of ECE departments are using this lab, Approximate area of the lab is 1250sq ft, Location of the lab is 2nd Floor and Room No-310B
	Electromagnetic Theory and Transmission Lines Laboratory	Microwave Horn Antenna Test Bench, X Band. Klystron based Microwave Wave guide test bench (Accessories:- Klystron Power supply, Klystron Mount, Klystron Tube, Circulator, Frequency Meter, Attenuator, Slotted Section with Probe, Detector mount, VSWR meter and BNC to BNC cable). X Band. Gunn Based Microwave Wave guide test bench (Accessories:- Gunn Power supply, Gunn Oscillator, PIN modulator, Circulator, Frequency Meter, Attenuator, Slotted Section with Probe, Detector mount, VSWR meter	

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		and BNC to BNC cable).X Band. Klystron based Microwave Test Bench for Klystron Characteristic(Accessories:- Klystron Power supply, Klystron Mount, Klystron Tube, Circulator, Frequency Meter, Attenuator, Slotted Section with Probe, Detector mount, and VSWR meter BNC to BNC cable).X Band. Microwave test Bench for Calibration of Attenuator(Accessories:- Klystron Power supply, Klystron Mount, Klystron Tube, Circulator, Frequency Meter, Attenuator, Slotted Section with Probe, Detector mount, VSWR meter and BNC to BNC cable).X Band. Microwave test Bench for Calibration of X-tal Detector(Accessories:- Klystron Power supply, Klystron Mount, Klystron Tube, Circulator, Frequency Meter, Attenuator, Slotted Section with Probe, Detector mount, VSWR meter and BNC to BNC cable).X Band. Microwave test Bench for Measurement of Coupling Co-efficient(Accessories:- Klystron Power supply, Klystron Mount, Klystron Tube, Circulator, Frequency Meter, Attenuator, Slotted Section with Probe, Detector mount, Multi-hole Directional Coupler, VSWR meter and BNC to BNC cable).X Band. Microwave test Bench for Measurement of Scattering Matrix(Accessories:- Klystron Power supply, Klystron Mount, Klystron	The laboratory located in the 2nd floor of the main building and housed in the room No. 306. The size of the laboratory is approximately 25x35 sq ft

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		Tube, Circulator, Frequency Meter, Attenuator, Slotted Section with Probe, Detector mount MAZIX TEE, VSWR meter and BNC to BNC cable).X Band. Microwave test Bench for Measurement of Unknown Impedance(Accessories:- Klystron Power supply, Klystron Mount, Klystron Tube, Circulator, Frequency Meter, Attenuator, Slotted Section with Probe, Detector mount, Attenuator, Movable short, VSWR meter and BNC to BNC cable).X Band. Microwave test Bench for Measurement of Phase Shift(Accessories:- Klystron Power supply, Klystron Mount, Klystron Tube, Circulator, Frequency Meter, Attenuator, Slotted Section with Probe, Detector mount, Phase Shifter, Movable Short, VSWR meter and BNC to BNC cable).X Band. Spectrum Analyzer with Tracking Generator. 150Khz-1000Mhz Power Meter, X Band. Power Sensor,X Band.	
	PCB Design Laboratory	Graphics & Photo cure – 02 PCB curving machine Photo Di-pi-coating Machine Proto-UV Double sided UV exposure with suction motor Proto Dye-Developer Proto Drilling 3000	PCB Design laboratory is situated 2nd floor; room no. 313.Geometric area of this lab is about 900 square feet.

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		Proto-ETCH PCB etching Machine Micro plate 1012 (4 parts) Artwork Light Table Dry Film Laminator (LAM-1200) Ammonical Etching Machine PCB Searing Machine RTM-10 Roller timing Machine Pro-Developer Stripper	
	Project Lab	Function generator- (Scientech) Variable Power supply: fixed and variable variety with different current rating. Make – Elnova, Scientech etc. Some of the power supply is in use designed and fabricated by students and technical staff of the department. Digital multimeters (Mastech-M3900) Oscilloscope Cathode Ray Oscilloscope. (25MHz, 30 MHz, scientech) Digital Storage Oscilloscope. (100MHz, scientech)	The general objective of the project lab is to apply the theoretical knowledge to solve the real life problems. It is also a pathway to enhance for employment and self-employment potential of graduates and enhance innovativeness.
CA	**316P**	27 Acer Desktop G630 with 12.5" TFT Intel Pentium Dual Core G630, RAM - 2GB HDD 500 GB SATA 7200 rpm, stendark keyboard, Mouse out 12.5" TFT 14 Processor - Intel Core2 duo e7500 @2.93 GHZ, 1066 MHZ, FSB, 3MBLL Cache Memory 1GB DDR2 800 MHZ ,	

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		chipset Intel G41, 250GB sata HDD, 22 X DVD writer, HCL multimedia Keyboard, HCL Optical Scroll Mouse, 15.6" TFT monitor	
	316Q	1 Processor - Intel Core2 duo e7500 @2.93 GHZ, 1066 MHZ, FSB, 3MBLL Cache Memory 1GB DDR2 800 MHZ , chipset Intel G41, 250GB sata HDD, 22 X DVD writer, HCL multimedia Keyboard, HCL Optical Scroll Mouse, 15.6" TFT monitor 24 INTEL Core 3rd Generation/ 4GB RAM / 500 GB HDD/ USB K/B/USB Mouse/18.5" DELL LED Wide Monitor; DELL OPTIPLEX 3020;	
CE	**Concrete Laboratory**	Compression testing machine Concrete mixer machine Motor vibrator Smith Rebound Hammer.	The main focus of Concrete laboratory is centred upon different areas like developing fundamental knowledge on concrete making materials, its production, quality control and monitoring health of reinforced concrete structures.
	Soil Mechanics Laboratory	Consolidation test Apparatus California Bearing ratio test apparatus Unconfined Compression Tester Compaction apparatus	The primary objective of soil mechanics laboratory is to excel the in depth knowledge on characteristics of soil towards design of foundation and for many civil engineering applications.
	Highway Engineering Laboratory	Los Angeles Abrasion testing machine Marshall stability test apparatus Benkelman beam apparatus Ring & Ball Apparatus Pen sky marten flash point apparatus	The laboratory offers the hand by handy solutions in testing road materials based on local needs by means of Los Angeles apparatus, Crushing strength apparatus, Bitumen testing apparatus. Mix design of bituminous concrete for specified requirements is also performed.
	Environmental Engineering Laboratory	BOD incubator Bacteriological Incubator COD apparatus	Lab facilities are specially designed for testing and analysing the

		Spectrophotometer UV tube visible Laminar Air Flow Machine Gutzeit generator	municipal and hospital wastewater. Testing of drinking water parameters including Arsenic is available in the laboratory. Recently department has procured a number of modern and sophisticated computer operated instruments for analysing drinking and waste water parameters.
	Surveying Laboratory	Automatic level fitted with tripod stand o Electronic digital theodolite o Transit varnier theodolite o Electronic Total Station	Surveying instrument with necessary accessories are provided from conventional survey to modern survey by means of chain survey, transit vernier theodolite, automatic level, dumpy level, digital theodolite and electronic theodolite - total station.
	Geology Laboratory	Petrology microscope Ore microscope Geomorphology model	Geology laboratory puts emphasis on identification of crystals, rocks and minerals with the help of hand specimens, petrology microscope, ore microscope, geo- morphology model clinometers. Interpretation on Geological map India is also illustrated in detail.
English	**Language lab 1**	CACM ISIL LAB 40 User Consoles +1 teacher Console PA system	Lab designed by IIT KGP in 2004 Upgraded various times
	Language Lab 2	ODELL DIGITAL LANGUAGE LAB 40 User Consoles +1 teacher Console PA system	Designed by Orell

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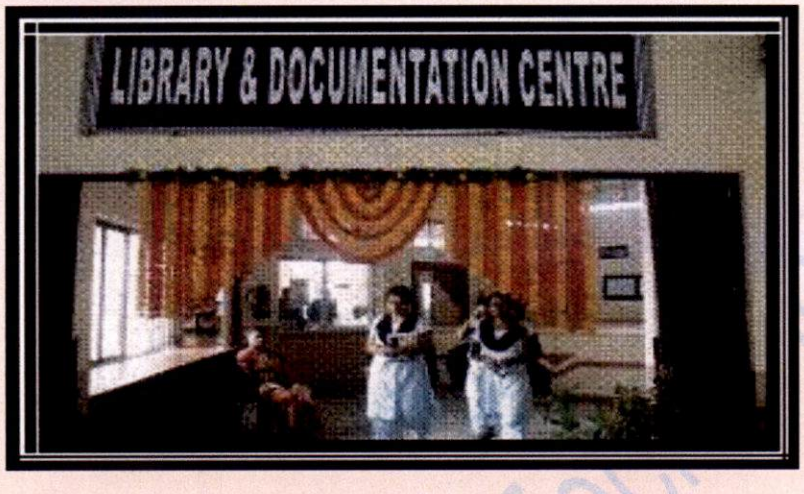
4.3 Library & Documentation Centre



Mission, Vision & Policy

The mission, vision & policy are same as with the Institution's mission, vision & policy.

Goal

The goal of the Library & Documentation Centre of the Institute to create and sustain an information environment that supports the educational and research needs and enables learning and advancement of knowledge of the Institution community.

Administration

The library is managed by the leadership of the Librarian who is advised and supported by the Library Committee.

Library Hours

From 8 am to 8 pm on Monday to Friday & 9.30am to 1.30pm on Saturday.

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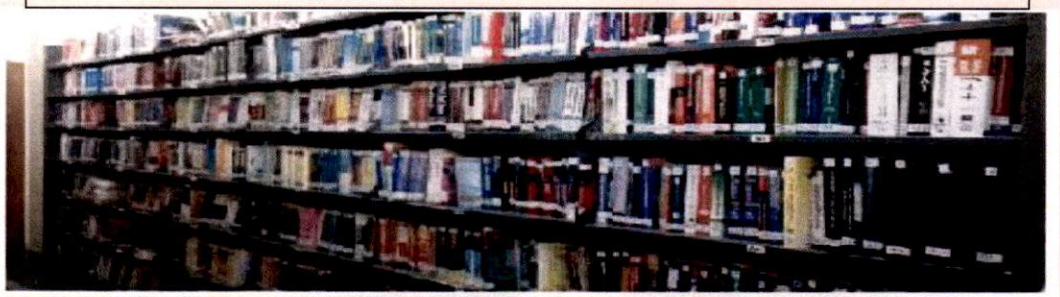
The computing & e-mail facilities are available in the library reading room with 10 computers connected with OPAC.

Library Floor Area

The different sections of the library alongwith their floor areas are given as follows:

Room No.	**Allotted For**	**Area(in m2)**
211	Stack room	416
212-A	Librarian's Office; Processing Section	85
212-B	Store room for Book Bank	75
213	Reading room	254
	Circulation Counter	120
208	Stack room	73.5
		Total Area 1023.5



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Library Collection :

Stream	Books	
	Title	Volume
BS&HU	934	8856
MCA	180	2367
CSE	733	10020
CIVIL	631	5894
EIE	628	3175
ECE	654	10537
EE	692	10545
IT	634	8269
ME	503	3042
Total	7645	79212

Annual Addition of Books :

Year	**Books**	
	Title	**Volume**
2015-2016	**7251**	**75550**
2016-2017	**7494**	**77945**
2017-2018	**7645**	**79212**

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Library Budget

Year	Books (Rs in Lakhs)	Magazines/Journals (Hard copy) (Rs in Lakhs)	Magazines/Journals (Soft copy) (Rs in Lakhs)	Misc. Contents (Rs in Lakhs)
2016-2017	7.77		12,86,000 (From TEQIP)	1.00

Library Services

1. Circulation
2. Book Bank
3. Internet facility (WiFi)
4. CD-ROM access
5. Print Journals
6. E-journals
7. NPTEL videos & lectures
8. Online Public Access Catalogue
9. Repository of question papers (BTech & GATE)
10. Reprography
11. E-books facility
12. Reading room facility
13. Current Awareness Services
14. Departmental Libraries

Library services beyond curricula

The library always encourage the reading beyond course curricula. Some examples of such initiatives are:

- It provides access to internet to develop self learning process of the student.
- Through departmental libraries, it encourages the R & D initiatives of the student.

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- The course materials of Infosys Campus Connect are readily available for the students in the departmental libraries.
- Library has good resources on soft skill development and aptitude tests.

Library Computerization

The library operations are computerized with LibSys (Library management software) as well as software prepared by Hash Technology Pvt. Ltd. The library maintains a barcode based circulation system for catering quick service to the users. The departments are well connected with the OPAC facility.

Digital Library

E-Books from leading Publishers

- ✓ 784 e-Journals From IEEE ASPP & Science Direct
- ✓ 1,20,000 e-books, 7,000 e-journals, 5,000 e-movies, 4,000e-newspapers (Through British Council)
- ✓ Inter Library Loan from British Council Library
- ✓ VCDs, multimedia CDs, presentations.
- ✓ Training material (CD, Hard copy)
- ✓ E-learning repository of 1800 GB
- ✓ 4,09,594 videos of 12482 subjects
- ✓ NPTEL Videos & Lecture Notes
- ✓ Self-learning material (CD, Hard copy)

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4.4 HOSTELS

NIT Hostels is A Home Away From Home is a hub of academic, sports, cultural and social activities. It is said that home is sweet. But even then life at home cannot be compared to the life in a hostel.

NIT provides separate hostel for boys and girls.

Each hostel has spacious and semi furnished rooms offering a pleasant environment. The hostels are well-equipped with spacious rooms along with other facilities like: **Wi-Fi, water purifier, water cooler and provision for indoor as well as outdoor games**. These hostels also have home like dining facilities that offer fresh & nutritious food to the students. Hostels give an environment to create most effective conditions for student development. **The hostels are located both within the campus and off the campus thus offering secured abode. Hostel also provides transportation at fixed timings to maintain security.** The hostel is designed in such a way as to provide optimum utilization of student's time for their overall personality development.

NAME OF FIVE HOSTELS , DETAILS AND FEES STRUCTURE

NAME OF HOSTEL	ADDRESS	GIRLS / BOYS NO OF SEATS	NAME OF WARDEN AND CONTACT INFO	FEE STRUCTURE
BOY'S HOSTEL 1 / NIT	46 Nilgunj Road, Kol109	85	Swapan Mahato 8159817157	@RS 33000 PER SEMESTER
BOY'S HOSTEL 2 / JISU	5no Railgate, Paschimpalli, Agarpara,Kol 109	26	Rajbahadur Chetri 9836983065	
BOY'S HOSTEL	32 DP Nagar Sripally,	13	Raju Baigari	

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3 /NIT	Belgharia, Kol 56		9732450502	
GIRL'SH OSTEL1 /CAMPU S	NIT,109, Nilgung Road	40	Putul Roy Singh 9330522930	
GIRL'SH OSTEL2/ NIT	27,BT Road, Prasadnagar, Kol58	28	Pranati Mishra 9330522930	
GIRL'SH OSTEL3 NIT/OIN DRILLA	15 Nilgunj Road, Agarbara Kol114	28	Pranati Mishra 9330522930	
GIRL'SH OSTEL4/ JISU	Manasa Appts, Dp Nagar, Belgharia, Kol56	18	Pranati Mishra 9330522930	
GIRL'SH OSTEL5/ JISU	Tarapukur, Paschimpally, Agarpara ,Kol109	11	Pranati Mishra 9330522930	

ADMISSION CRITERIA

- Seats available for first year students are 250-300 including all hostels.
- Allotment of seats as per the norms laid down by the college.
- Only those students whose parents do not reside in or around the Capital Region OF KOLKATA are eligible for admission to hostel.
- Resident students are re-admitted to the hostel based on the following criteria: • CGPA of 6 • 67% minimum college attendance in the previous academic session

MEDICAL FACILITIES

- Whenever needed, HOSTELLER may utilize medical services provided at the SAGAR DUTTA MEDICAL COLLEGE AND HOSPITAL.
- The college doctor is available from 11:00 a.m. - 2:00 p.m. on the weekdays.
- The medical counselor is available twice a week (on Tuesdays & Thursdays) from 1:30 p.m.- 3:30 p.m

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MESS AND CANTEEN FACILITIES

Mess facility is an integral part of the campus which provides nutritious homely food to all hostellers, day scholars, faculty & staff members and visitors. It provides 4 meals a day. Quality food is prepared under strict hygienic conditions. The food is served in the dining area keeping all the sensitivities in consideration.

- All the hostel mess serves Vegetarian/Non- Vegetarian Food only and operates in self-service mode.
- The menu of the items is designed considering the requirements of the students and nutrition is added to make it healthy and complete.
- We offer morning tea with regular breakfast, lunch, evening snacks and tea, dinner and milk to all hostellers.
- The Canteen facility is available in all the campuses of Hostels which comprises of healthy & delicious variety of VEG/NON-VEG snacks & food

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4.5 MEDICAL CENTRE

- The institute has an exclusive medical centre equipped with all facilities for providing first-aid and first hand medical treatment. The room has medical beds for emergency cases. A professional doctor is available during college hours for taking care of any emergency.
- Free medical check-up drives are arranged from time to time, which includes eye testing and a thorough check up of salient features like Blood pressure, ECG and diabetes.
- The centre plays a pivotal role in extending nursing facilities.

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Chapter 5 ..... Academics

5.1 Programmes offered

Mechanical Engineering (ME) - 60 Seats
Computer Science & Engineering (CSE) - 180 Seats (NBA Accredited)
Electronics & Communication Engineering (ECE) - 120 Seats (NBA Accredited)
Information Technology (IT) - 60 Seats (NBA Accredited)
Electrical Engineering (EE) - 120 Seats (NBA Accredited)
Civil Engineering (Civil) - 120 Seats (NBA Accredited)
Electronics & Instrumentation Engineering (EIE) - 60 Seats

POST GRADUATE (FULL TIME): M. TECH, MCA, (2-YEAR)
Computer Science & Engineering (CSE) - 18 Seats (NBA Accredited)
Electronics & Communication Engineering - 18 Seats (NBA Accredited)
Electrical Engineering -Power Systems - 18 Seats (NBA Accredited)
Civil Engineering - Structural Engineering - 18 Seats
Master of Computer Application (MCA) -60 seats

DIPLOMA ENGINEERING (FULL TIME / AICTE APPROVED) (3-YEAR)
Electronics & Telecomminication Engineering (ETCE) -60 seats
Civil Engineering (CE) 60seats
Electrical Engineering (EE) 60 seats

5.2 Departmental Activities

5.2.1 Department of Computer Science and Engineering

About Department:

The mission of the Computer Science and Engineering Department of Narula Institute of Technology is to build and sustain a high quality and broad area-based teaching and research program in computer science, to prepare students for successful professional careers both in industry, academics and as entrepreneur, and to provide service to the nation as a good human being.

Department started its journey with 60 (sixty) Seats in B.Tech program in 2001and in the year of 2007 intake in B.Tech program increased to 120 and M. Tech Course introduced with intake 18. In 2019 B.Tech program again increased to 180. Both the Programs (B.TECH and M.TECH) are NBA Accredited. The M.Tech program in department of Computer Science and Engineering is the only NBA Accredited M.Tech program in west Bengal.

At present, the department of Computer Science and Engineering headed by Mr. Jayanta Pal, has adequate number of core faculty members apart from many visiting professors, distinguished professionals from industry, eminent researchers and teaching/ research assistants. The department has one of the best infrastructure including domain-specific labs associated with the Computer Science and Engineering - many of these labs are equipped with high configure machine and industry benchmark software. The department has a good record of organizing seminars, workshops, symposia and conferences in emerging technological areas.

Highlights:

Well equipped Laboratories with high configured computers. Hands on lab session using industry standard software

All the Faculty of the Department has undergone Outcome based pedagogic principles for effective teaching.

Almost all the Faculty has enrolled/registered for PhD.

All the students of 1st year and 2nd year have been guided to present on a technical topic to make them ready to go.

All the students from 2nd year onwards have been given aptitude training by external expert to make them ready for campusing.

Interested students are guided to prepare for the GATE Examination. 90% students from the department got placed.

Achievements:

- B.Tech and M.Tech both program are NBA accredited.
- The only NBA Accredited M Tech (CSE) program in West Bengal.
- Maximum number of placement records in the Institute
- Every year 2-3 students from B Tech Program got admitted in abroad for MS or Equivalent program.
- Every year maximum number of the student got selected from department for winter training program in AIT Bangkok.

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The department has got DST project of 14.5 lakhs funded by central Govt. under the guidance of Dr. Kunal Das.

Faculty Achievement:

1) **Mr. Jayanta Pal:**
   A) Received appreciation certificate from IIT, Madras for remarkable performance under NPTEL Local Chapter at Narula Institute of Technology
   B) Mr. Jayanta Pal received SPOC CERTIFICATE from NPTEL /IIT

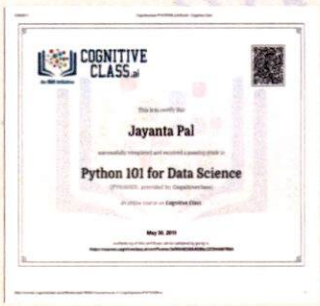
   C) Under the mentorship of Mr. Jayanta Pal, CSE 1st year student Kumar Kalpadiptya Roy received Topper 5% category certificate from NPTEL in Developing soft skill and Personality.

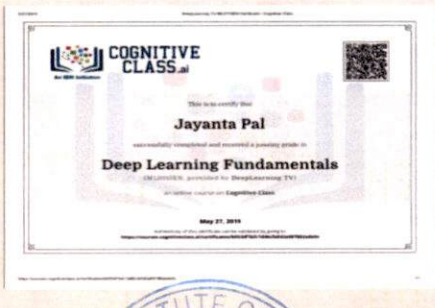
D) Under the mentorship of Mr. Jayanta Pal, CSE 1st year student Kumar Kalpadiptya Roy received Topper 2% category certificate from NPTEL in Problem solving through Programming in C.

   E) Under the mentorship of Mr. Jayanta Pal, CSE 1st year student Nilavro Seal received Topper 1% category certificate from NPTEL in Problem solving through Programming in C.

   F) Mr. Jayanta Pal successfully completed and received a passing grade in Python 101 for Data Science (PY0101EN, provided by Cognitive class) an online course on Cognitive Class.

   G) Mr. Jayanta Pal successfully completed and received a passing grade in Deep Learning Fundamentals (ML0115EN, provided by DeepLearning.TV) an online course on Cognitive Class





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2) **Dr. Kunal Das:**

A) **Dr.Kunal Das:** Early Career Research Award 2017-2020 from DST-SERB received a Project grant of Rs 14,46,540 by DST-SERB

B) Dr.Kunal Das: Guest Editor a Special Issue for the International Journal of Reconfigurable Computing.

D) Dr. Kunal Das was Resource person for AICTE sponsored FDP on "Recent Dev. In AI & Robotics" held on 03-1-2018 to 13-01-2018

E) Under mentorship of Dr. Kunal Das, students (Ritwika Banerjee, Srimanta Roy Chowdhury, Bhargav Ranjan , CSE 3rd year) received "Vishwakarma Award 2018 Regional round.

F) Dr. Kunal Das received AICTE RPS fund of 21 lakhs

Faculty publication

Journal	Conference	Book chapter	Book
10	8	2	

Seminar/workshop

Serial No	Name of the faculty	Type of the course	Name of the course	Organized by	Venue	Duration
1	Chandrima Chakrabarti	Workshop	Network security tools	GNIT, NASSCOM	GNIT	Two weeks (July 2018)
2	Ananya Banerjee	Workshop	Network security tools	GNIT, NASSCOM	GNIT	Two weeks (July 2018)
3	Koushik karmakar	Workshop	Faculty Training	APAI	Techno India Salt lake	15-19 th Jan 2019

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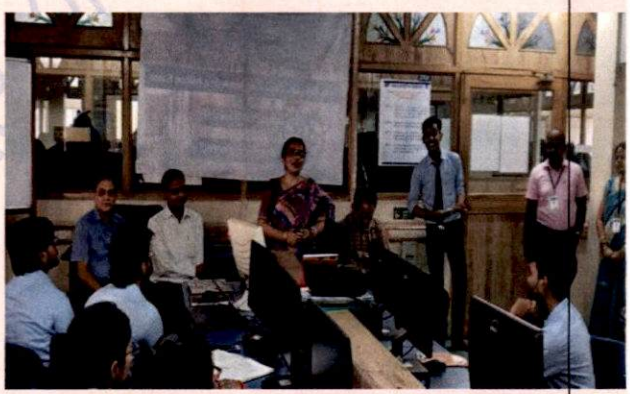
4	Koushik karmakar	Seminar	Digital Training	MAKAUT	MAKAUT	One day (24.04.2019)
5	Koushik karmakar	Workshop	Network security tools	GNIT	GNIT	Two weeks (July 2018)
6	Debjani chakraborty	Workshop	Faculty Training	APAI	TechnoIndia Salt lake	One week
7	Dr Biswajit Halder	FDP	Faculty Training	AICTE and JISCE	New Delhi	Four Days
8	Chandrima Chakrabarti	Workshop	workshop on "Cyber Security" by NASSCOM at Guru Nanak Institute of Technology	GNIT, NASSCOM	GNIT	July 7-13 2018
9	Mousumi Saha	FDP	AICTE organized Student Induction	AICTE	Sister Nivedita University	16-18 July,2018
10	Jayanta Pal	Workshop	SPoC Workshop for NPTEL, organized by IIT KGP	NPTEL	IIT KGP	02.02.2019

Seminar/workshop/events organized

1) CSE dept. organized a workshop on "DATA ANALYSIS AND MACHINE LEARNING", from 4th October-11th October, 2018, where we have the 3 Eminent experts from the industry. Dr. Prabir Aditya, an adjunct professor of CSE department, who is not only just a professor but also a co-founder of "Domain Technology Orchestrator". We also have Dr. Anupam Mukherjee who is chief "Data Scientist" and have been in this field for numerous years. He is also a co-founder of "Domain Technology Orchestrator". Last but not the least we have Mr. Padmanava Rudra who is "Vertical Head" and have been working for last 36 years in various renowned companies. Currently he is serving as a vertical head in "Spring and River".



This Workshop was flagged off in the presence of our Honorable Principal Prof. (Dr.) M. R. Kanjilal, our respected HOD Mr. Jayanta Pal, program coordinator Ms. Sagarika Chowdhury, and all other eminent faculty members of CSE department.

At day one, students started learning with introduction to R programming language and Usage of important data manipulation packages, such as, dplyr. Day two continues with Basic Statistics, Data visualization with the help of ggplot and Exploratory Data Analysis (EDA). Every day students gone with hands on practices. Day three was on Supervised learning with Regression and logistic regression. Advanced regression and classification

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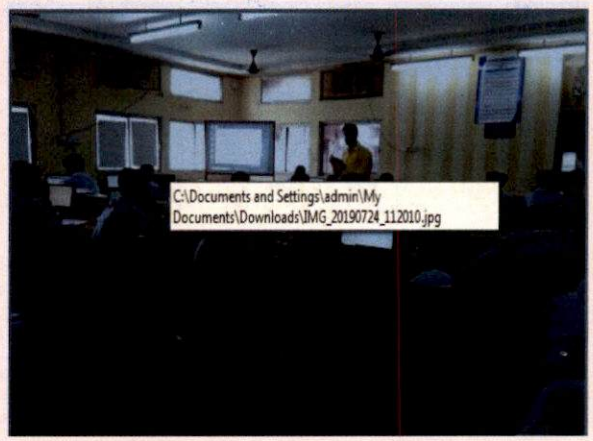
techniques were covered in day four. Concept of Unsupervised learning was also shared on that day. Last day was full on case studies, troubleshooting and discussions.
The workshop continues till 11th October and ended with a valedictory session. The students shared their marvelous experience and appreciate the worthless effort by the facilitators. The speakers also shared their journey with these wonderful students and wishing them a grand success in their coming bright future. Hope this workshop will add an additional feather in "student cap" and will bring laurels and great success in their lives.

2) Technical: Training Courses

Four Technical Training courses were organized for B.Tech 3rd year and 2nd year students on PHP, Android and Python courses from 09.07.18 to 20.07.18. Eminent faculties from renowned industries took these Technical courses. Batches conducted in two sessions. Duration for first session was from 10 AM. – 1 PM. and for second session was from 2 PM- 5 PM. Each batch contains 40 students. After completing these training courses students enrich their knowledge in these technical fields and they were delighted to get opportunity for exploring latest technologies and developments of Technology



Industry visit:

A group of 30 students of B.Tech(CSE) 3rd year students attended an industrial visit to Globsyn Business School(An Educational Initiative) on 18th April, 2019. The team of students was accompanied by one faculty member. Professional started session to give valuable exposure on real life applications of Behavioral, Social, and Business Sciences, Cyber-Physical Systems, Data and Decision Sciences, Embedded Systems and Robotics.

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3) NSS SWATCH BHARAT ABHIJAN and TREE PLANTATION:

Computer Science and Engineering Department of NiT organised SWATCH BHARAT ABHIJAN and TREE PLANTATION on 14th August on the eve of Pre Independence Day Celebration. The students participated enthusiastically and vowed to save Trees and make a pollution free world.

5) NSS Project display: NSS Project display was organized by CSE dept. on Nov 29, 2018 at NIT. CSE 1A and CSE1B students participated in this event.

6) NSS cloth donation to less fortunate people

CSE dept. organized NSS activity to donate cloths among less fortunate people of the nearby areas on 9th May 2019. CSE 1st year students participated in this event.

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Student activities

Students' achievement

Name	Student's Achievement/Awards/GATE/M.Tech/Ph.D PURSUING
Anirban Das, Souradip Ganguly, Somraj Mukherjee, Rohan Dutta, and Jagriti Chourasia	Published paper in International conference entitled "Detection of Black Hole Attack in Delay-Tolerant Network" on 1st February 2019 under the guidance of Ms. Chandrima Chakrabarti, Ms. Ananya Banerjee
Ms. Soumasree Talapatra	got chance in a research project at ISI, Kolkata under Prof. Nabanita Das.
Ms. Asmita Banerjee	got chance in a research project at IISER, Kolkata under Prof. Prasanta Panigrahi.
Rima Ghosh	Completed Python Training Course in Tech Solution Pvt Ltd.,(MyWbut,Salt Lake, Kolkata) & Certified after completion of a given project,"Library Management System" using Python.
Neha Raj	Attended workshop on New Technologies for Development at AIT Bangkok, NPTEL ELITE certificate in "Enhancing Soft Skills and Personality"
Priyanka Dutta	NIT jewels for academic performance (1st year), NCSTCS (2nd prize),
Arijit Das	Got "Special Jury Award" from Regent Education And Research Foundation for project display in Feb, 2019, Got "Best Innovative Project" award from "JIS college of Engineering" for project display in Feb, 2019, Got 93% marks in NPTEL Online Certification Course "Joy Of Computing Python" exam and got Gold Certificate from NPTEL in Jan,Got Selected for the semi final round in Smart India Hackathon 2019 Hardware Edition
Abhishek Anand	Silver medal winner in Annual sport 2019, Highest Paper presenter award in NiT Jewels
Ashmita Majumdar	Innovative Idea prize and certificate, Departmental topper certificate,
Kumar Kalpadiptya Roy	Topper in 5% Category in NPTEL Course : Developing Soft Skills and Personality,Topper in 2% Category in NPTEL Course : Problem Solving Through Programming in C, Stood 2nd In 'Code War' (Coding) Event of Tech Fest 'Kritanj', 2019,
Nilavro Seal	NPTEL - Developing Soft skill and Personality (Elite: 81%), NPTEL - Problem Solving through Programming in C (Silver topper: 87%).

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Suryai Majumder	attended and successfully completed the workshop named AIT Education Camp Study Tour on "New Technologies for Development" held on 1-15 July 2019 at Asian Institute of Technology, Bangkok, Thailand, participated as a team and won 3rd prize in "GPS Treasure Hunt Game" held during 1-15 July 2019 at Asian Institute of Technology, Bangkok, Thailand.

Sl.No.	Department	Paper Name	Student name	Faculty Mentor	Details
	CSE	"Detection of Black Hole Attack in Delay-Tolerant Network"	Anirban Das, Souradip Ganguly, Somraj Mukherjee, Rohan Dutta, and Jagriti Chourasia	Ms. Chandrima Chakrabarti, Ms. Ananya Banerjee	International Conference 1-3 Feb 2019
		Cost Optimization Technique for Quantum Circuits	Anirban Basak M.Tech Final Year Student	Dr. Kunal Das	International Journal of Theoretical Physics, June 2019

Summer/winter

Department	Name of the organization	Period
CSE	Ardent Computech Pvt Ltd	(July –Aug) 2018
	Computer Society of India	(July –Aug) 2018
	Future Tech	(July –Aug) 2018
	Globsyn	(July –Aug) 2018
	HeadfasT computer science Academy	(July –Aug) 2018
	HEWLETT PACKARD	(July –Aug) 2018
	INDIAN SCHOOL OF ETHICAL HACKING	(July –Aug) 2018

	Micro Pro	(July –Aug) 2018
	RCPL	(June-August) 2018
	Web Tek Labs Pvt. Ltd	(July –Aug) 2018
	Ishapore Rifle Factory	(July –Aug) 2018
	Vyrazu lab	(July –Aug) 2018
	Ogma Tech lab	(July –Aug) 2018

Industry Visit

Name of the organization	Period
Ogma Tech lab	13th September, 2018
Ogma Tech lab	11th October, 2018
Ogma Tech lab	10th February, 2019
Globsyn Business School(An Educational Initiative)	25th April 2019

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5.2.2 Electronics and Communication Engineering Department

About the Department :

The Department offers four years full time B-TECH program in ECE. The course is accredited by NBA. The average passing result is excellent in the department. Apart from this we are running P.G. Programs, M-TECH. in Electronics & Comm. Engg. since 2009. The department of ECE offers premier professional technical training that keeps in pace with the latest developments in the field of Electronics and Communication Engineering. The dept has excellent infrastructure, highly experienced faculties and professionals, associated with research work which collectively ensure dynamic and vibrant environment in the campus. There are so many high valued simulation software are present in department like Tanner SPICE, CADENCE, Matlab 2014b, Visual TCAD, HFSS, Qualnet, Active HDL, MPLS, Altera & Quartus II, TMS Kit with Code Coposer Studio etc. The dept has PCB design Laboratory with full set up sponsored by AICTE.

Faculty Achievement :

1) Mr. Kaushik Sarkar attended "INNOMPICS GAMES" at Malaysia as a member of CoE with Five Students of NiT from 26th September to 30th September, 2018.

2) Dr. Saradindu Panda reviewed One paper for a SCI Journal "Journal of Nanoelectronics and Optoelectronics" on 17th September, 2018

3) Mr. Puspak Pain received Best Paper Award in international conference, ICCACCS-2018.

4) Mr. Paranab Hazra received Best Paper Award in international conference, ICCACCS-2018.

5) Sandhya Pattanayak is selected as the member of Board of Studies of ECE Dept, National Institute of Science and Technology, Orissa.

6) Mr. Surajit Bari acted as a coordinator in a technical session of IEEE Sponsored 3rd International Conference on DevIC 2019 at Kalyani Government Engineering College (KGEC), Kalyani, organized by IEEE Student Branch Chapter, KGEC in association with ECE Department, KGEC during 23rd-24th March, 2019.

7) Dr. Saradindu Panda acted as a session chair in a technical session of 3rd International Conference on DevIC 2019 at Kalyani Government Engineering College (KGEC), Kalyani, organized by IEEE Student Branch Chapter, KGEC in association with ECE Department, KGEC during 23rd-24th March, 2019.

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8) Ms.Rimpi Dutta visited Koyoto Japan for presenting her research paper in 6th Annual conference on Engineering and Information technology 26-28th March,2019 organized by ACEAIT , Japan.

9) Ms. Arpita Santra, Ms. Arnima Das, Mr. Puspak Pain enrolled for Ph.D. at MAKAUT.

10) Rimpi Datta, Registered for PhD under Jadavpur University, May 2019

11) Mrs Sandhya Pattanayak Completed the final Ph.D Defence ViVa on 14th June 2019. waiting for the provisional certificate.

Name of Faculty of ECE Dept .Qualified in NPTEL in January –April Session :2019

SL No.	Name of Faculty	Department	Course Name	Percentage	Remarks
1	Dr. Anilesh Dey	ECE	Microprocessor and Microcontroller	63	Elite
2	Surajit Bari	ECE	Fundamental of Semiconductor Devices	71	Elite+ Top 5%
3	Surajit Bari	ECE	CMOS Digital VLSI Design	75	Elite+ Silver +Top 5%

Faculty publication overview

Journal	Conference	Book chapter	Book
16	5	--	--

Seminar/workshop attended:

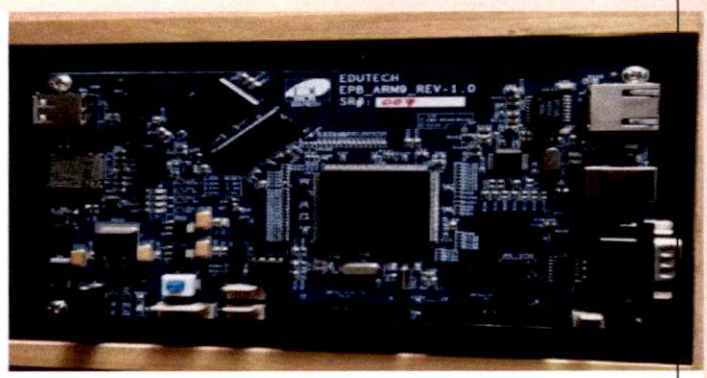
Name of the faculty	Type of the course	Name of the course	Organized by	Venue	Duration
Kaushik Sarkar	workshop	IEEE CIS Intel Academy One Day Workshop	Intel & IEEE CIS	Indian Statistical Institute, Kolkata	13.07.2018 , one day
Kaushik Sarkar	workshop	Data Analytics	Indian Statistical Institute, Kolkata	Indian Statistical Institute, Kolkata	10th- 13th March 2019
Dr. Saradindu Panda	workshop	4th World Summit on Accreditation Challenges & Opportunities in	NBA and AICTE	Hotel Ashoka, New Delhi	07th -09th Sept 2018

		Outcome based Accreditation(WOSA 2018)			
Dr. Saradindu Panda	workshop	ARM and Embedded System	ECE Department, NiT	NIT	09th -13th July 2018
Dr. Saradindu Panda	Industrial Visit	Industrial Visit at Gun and shell Factory Kossipore,Dumdum	ECE Department	Gun and shell Factory Kossipore,Dumdum	14th- 15th Jan 2019
Dr. Saradindu Panda	Seminer	IEEE Execom Meeting, 2019	IEEE Kolkata Chapter	Lalit Great Eastern, Kolkata	15.01.2019, one day
Dr. Saradindu Panda	Seminer	Technical Seminar	IETE & ECE Department, NiT	NIT	22.02.2019, one day
Dr. Saradindu Panda	Execom Meeting	IEEE CASS Execom Meeting	IEEE CASS Section, Kolkata Chapter	ECE Department, NiT	20.02.2019, one day
Dr. Saradindu Panda	Conference	DevIC 2019	IEEE & KGEC, Kalyani	KGEC, Kalyani	23rd-24th March 2019

Seminar/workshop/events organized

Departmental Events:

1) Five Days Workshop on "**ARM & Embedded System**" was held on 9th to 13th July , 2018 at the Department of Electronics and Communication Engineering. The resource person was Dr.Anilesh Dey,Dr.Biswarup Neogi , Mr.Sohan Ghorai,Mr.abhisek Mallick from ESL technologies, Kolkata.



Details of **EPBPIC18F target board****

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2) One day seminar on "Stratosphere Communication" was organised at 2.00 P.M, Seminar Hall,Narula Institute of Technology on 12th October 2018. today successfully.More than 80 students and more than 30 staff members and faculties were present. Prof. (Dr.) J K Mandal, Kalyani University, Hony. Sec. IETE Kolkata was the keynote speaker of the day.The programwas organised by ECE Department on behalf of ISF (IETE Student Forum).

3) One day seminar was organised by ECE dept. on 22nd February, 2019 on "SOME ASPECTS OF CMOS AND VLSI CIRCUIT DESIGN" for ECE 1st year, 2nd year, 3rd year and 4th year in collaboration with IETE Kolkata Centre. Prof(Dr) J. K. Mondol , Kalyani University and Secretary of IETE Kolkata gave an introduction about the seminar. Prof. (Dr) A. K. Mukhopadhyay, Executive Member of IETE Kolkta explained the importance of IETE Student forum and introduced the Speaker of the program Prof. (Dr.) S K Sanyal.

4) Electronics and Communi-cation Department had organized two day industrial training at Gun & Shell Factory, Cossi-pore . The training started at 10.00 A. M. for both 14th and 15th January 2019. Students were exposed to different kinds of tools and instruments for producing arms and arsenals. Most of the tools and instruments were processed controls. Students learned auto-mation, embedded systems, signalling regarding the systematic production of the ingredients of the arms and arsenals.

5) The Inauguration ceremony of Narula Institute of Technology IEEE Student Branch and IEEE CAS Student Branch Chapter followed by a technical lecture session, was observed beautifully on the 28th November 2018 under the aegis of the Electronics and Communication Engineering Department of Narula Institute of Technology, in association with IEEE CASS Chapter, Kolkata Section.

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Student activities

Students achievement

Name	Name of department	Student's Achievement/Awards/GATE/M.Tech/Ph.D PURSUING	Date
Gourav Chakraborty	ECE	NPTEL certificate on "Basic Electronics", ELLITE	2018
Mr. Somjit Pramanick		Placed in TOP 5% with ELITE category, NPTEL certificate on "Basic Electronics"	
Anushka Chakraborty		NPTEL certificate on "Basic Electronics", ELLITE	
Ms. Debarati Mitra		Selected as Interim Student Branch Chapter chair of IEEE CAS Society by IEEE, USA	
Mr. Sambhunath Surai & Mr. Sayan Halder		Awarded 1st Prize in Group C (Under Graduate Level) in Science Model Competition	
Mr. Sambhunath Surai & Mr. Sayan Halder		Won the 1st Prize for displaying the model "Low cost gesture control wheel chair"	
Gourav Chakraborty		Published Paper at ICCACCS 2018	
Mr. Ranit Dey		Selected as Interim student Branch Chair by IEEE, USA	2018
Sattick Bhadra Sudipta Chakraborty, Megha Ganguly, Pallabi Chatterjee, Shalini Roy		Published a paper on "Cell phone detector circuit" in IETE Eastern Zonal Seminar	2018
Soudeep Chowdhury, Niyan Ghosh, Nilanjan bose, Ddebanjan Mondal, Tuhin Chowdhury		Published a paper on "Laser light security system" in IETE Eastern Zonal Seminar	
Arpita Basu, Priyanka Sarkar , Rajdeep Sinha		Published a paper on "Application of cmos for smart india" in IETE Eastern Zonal Seminar	

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Rohit Chatterjee, Diksha Yadav and Saptarshi Bandyopadhyay		Participated in Naval Diving" organized by Maritime Society of India, Govt of India at Dimond Harbour	

Student publication

Paper Name	Student name	Faculty Mentor	Year
Body Language Using Artificial Intelligence	Debarati Mitra	Ms. Sangita Roy	2018
Wireless Charging	Sourav Sadhukhan	Ms. Sangita Roy	2018
Footsteps Power Generation by Piezoelectric Effects	Sourabh Chowdhury	Ms. Sangita Roy	2018
Published a paper on "Cell phone detector circuit" in IETE Eastern Zonal Seminar	Sattick Bhadra Sudipta Chakraborty, Megha Ganguly, Pallabi Chatterjee, Shalini Roy	Mr. Surajit Bari	2018
Published a paper on "Laser light security system" in IETE Eastern Zonal Seminar	Soudeep Chowdhury, Niyan Ghosh, Nilanjan bose, Ddebanjan Mondal, Tuhin Chowdhury	Soumen Pal, Puspak Pain	2018
Published a paper on "Application of cmos for smart india" in IETE Eastern Zonal Seminar	Arpita Basu, Priyanka Sarkar , Rajdeep Sinha	Sangita Roy	2018

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Participated in Naval Diving" organized by Maritime Society of India, Govt of India at Dimond Harbour	Rohit Chatterjee, Diksha Yadav and Saptarshi Bandyopadhyay	Ms. Sandhya Pattanayak	2018
IoT (Internet of Things): Smart Farming	Tanmoy Munshi	Dr. Saradindu Panda	2018
Lie Detection based on Facial Expression,Body Language Using Artificial Intelligence	Debarati Mitra	Dr. Saradindu Panda	2018

Industry visit

Sl.	Name of Industry	Year	No of students	Date
1	**Pixel Solutionz**	3rd	30	27/10/2018
2	(Bharat Sanchar Nigam Ltd.) at salt-lake	4th	20	27/07/2018
3	Gun & Shell Factory, Cossipore, Kolkata	3rd	30	14-15 Jan 2019
4	MSME Central Tool Room and Training Centre, Bonhoogly	3rd	51	5th April 2019

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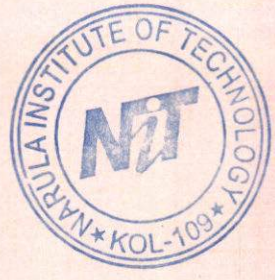
Summer/winter training:

Department	Name of the organization	Period
ECE	Webtek Labs	2018-19
	Jadavpur University	2018-19
	Micro Pro	2018-19
	Indian Railways	2018-19
	Bharat Sanchar Nigam Ltd.	2018-19
	ONGC	2018-19
	Ardent ComputechPvt. Ltd.	2018-19
	Ogma Tech Ltd.	2018-19
	Doordarshan Kendra, Guwahati	2018-19
	Airport Authority of India Ltd.	2018-19
	CTTC Kolkata	2018-19
	Doordarshan Kendra, Patna	2018-19



5.2.3 *Electrical Engineering Department*

Faculty achievement (Faculty publication)

Journal (no)	Conference(no)	Book chapter(no)	Book(no)
12	6	2	0

Seminar/ Workshop faculty (attended by july 18-

Name of the faculty	Type of the course	Name of the course	Organized by	Venue	Duration
Arkendu Mitra	Workshop	Research Methodology	Department of Applied Physics, CU	Department of Applied Physics, CU	03.07.2018 to 12.07.2018
Sudhangshu Sarkar	Seminar		TERI and Ministry of MSME		23.08.2018 to 23.05.2018
Pratyusha Biswas Deb	Seminar	Centre of Excellence	Committee of CoE, Narula Institute of Technology	Narula Institute of Technology	21.08.18
Arkendu Mitra	International Conference	Computational Advancement in Communication Circuit and System (ICCACCS 2018)	Narula Institute of Technology	Narula Institute of Technology	23.11.2018 to 24.11.2018
Arkendu Mitra	Seminar	Panel Discussion on Trade Fair	Indian Chamber of Commerce	The Gateway Hotel, EM Bypass, Kolkata	09.02.2019
Dipu Mistry	Workshop	SCADA Power Application in Power System	Guru Nanak Institute of Technology	Guru Nanak Institute of Technology	24.04.2019
Kamalika Banerjee	Workshop	SCADA Power Application in Power System	Guru Nanak Institute of Technology	Guru Nanak Institute of Technology	24.04.2019

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Seminar/workshop/events organized (july 18-Jun19)

Name of the event /seminar/conference /workshop/training organized	Date/Duration	Target Audience	Number of Participants
1st year Induction on Yoga and meditation	14.08.2018	1st Year Students	120
1st year Induction Programme	17.08.2018	1st Year Students	200
Invited Lecture on Modern Control of AC Machine - Industrial Aspect	04.09.2018	EE Students	75
Three days workshop on Innovation, the new knowledge Mantra	18.09.2018 to 20.09.2018	EE Students	200
Robotics Workshop on 1. B plan 2. App Development 3. Robotics	24.01.19 to 25.01.19	EE Students	200
Workshop on Embedded system and solar system	25.02.19 to 28.02.19	EE Students	70
Indusrial Seminar on Modern Trends of Electrical Engineering in Industry	28.03.2019	EE Students	205

Industry visit

Name of the organization	Period
TETMAX LIMITED	1 day
Switchyard, metro rail electrification etc.	1 day
Power generation, control and protection	2 days

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Student activities

Students' achievement

Name	Student's Achievement/Awards/GATE/M.Tech/Ph.D PURSUING	Date
	3rd Position in rhapsody,2018	13/09/2018
	Project has been successfully shortlisted in "CARBON ZERO CHALLENGE 2019" a unique pioneered by Indian Institute of Technology , Madras in collaboration with Virtusa & Shaastra 2019	21/09/2018
Nabina Manna, Saptita Nan	Two projects of EE students are selected in The Annual Techno Management Festival of IIT(BHU), VARANASI	
	EE students have participated in Technex 2019 to prove their technical &innovative skills, result awaited.	
	14 nos. of EE 2nd year students passed successfully with avg 60% Marks in NPTEL course	
	4 nos. of EE 3rd year students passed successfully with avg. 65% Marks in NPTEL course	
Soumya Subhra Biswas and Tathagata Das	students of EE have had great exposure to present their project prototype in CII organized conference titled INNOVATION 2019 AT itc SONAR ON 16TH March, 2019	
Subham Das	4th Year EE cleared GATE 2019 with Score 421	
Ronojit Bose, Subhankar Halder, Anupam Das, Ruchi Sharma, Indrani Roy	achieved consolated prize and in another category selected with in top 15.	8th March ,2019 March,2019
	10 nos. students got a chance to go to AIT, Bangkok.	

Student

Sl.No.	Department	Paper Name	Student name	Faculty Mentor	Details
1.	EE	Modelling and Design of Maximum Power Point Tracking Algorithm Applicable to DC-DC Boost Converter	Souvik Deb, Abhishek Ghosh	Arkendu Mitra	International Conference on Computational Advancement in Communication Circuit and System (ICCACCS)
2.	EE	Protection of Power Electronic	Vivek Kumar Choubey,	Arkendu Mitra	IEEE International Conference on Power

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		Switches in a VSI against Over-Current and Shoot-Through Faults	Jayatra Simlai, Tarpan Ghosh, Supratim Biswas, Subir Das		Electronics, Intelligent Control and Energy Systems (ICPEICES)
3.	EE		NABINA MANNA, SAPTATI NAN, SUDESHNA DUTTA, IPSITA DEY	PRATYUSHA BISWAS DEB	International Conference
4.	EE	Prototype model for controlling of soil moisture and pH in smart farming system	Suvomoy Bhattacharyya	Dr.Sandip Chanda	International Conference on Computational Advancement in Communication Circuit and System (ICCACCS)
5.	EE	AVR microcontroller based error-free public addressing system	Suvomoy Bhattacharyya	Dr.Sandip Chanda	Conference on Computational Advancement in Communication Circuit and System (ICCACCS)
6.	EE	Artificial Intelligence based economic control of microgrids: A review of application of IoT	Pramila Das	Dr.Sandip Chanda	Conference on Computational Advancement in Communication Circuit and System (ICCACCS)

Summer/winter

Name of the org	Period
WBSEDCL	2 Weeks
WBPDCL	1 Month
DVC	1 month

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5.2.4 *Civil Engineering Department*

Faculty achievement

Faculty publication

Journal (no)	Conference(no)	Book chapter(no)	Book(no)
2	2	0	0

Seminar/ Workshop attended by faculty (july 18-

Name of the faculty	**Type of the course**	**Name of the course**	**Organized by**	**Venue**	**Duration**
Shiladitya Mandal, Anasuya Mondal, Abhisek Hazra, Rajkumar Banerjee	Faculty Devlopment Programme	NASSCOM FDP	Gurunanak Institute of Technology	Gurunanak Institute of Technology	2nd -7th july,2018
Shiladitya Mandal, Anasuya Mondal, Abhisek Hazra, Rajkumar Banerjee	Faculty Devlopment Programme	NBA Accreditation	Gurunanak Institute of Technology	Gurunanak Institute of Technology	August,2018
Anasuya Mondal	Short Term Training Programme	Commentary on IS:456-2000 explanation interpretation application & limitation	NITTTR Kolkata	NITTTR Kolkata	24.06.2019-28.06.2019

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Shiladitya Mandal, Anasuya, Puja Halder Mondal	Seminar	Climate Change and Water Crisis	IIEST Shibpur	IIEST Shibpur	21.06.2019

Seminar/workshop/events organized (july 18-Jun19)

Name of the event /seminar/conference /workshop/training organized	Date/Duration	Target Audience	Number of Participants	Remarks/Notes
Training program (AutoCAD)	26 Sep-12 Oct	2nd year B.Tech	144	
Training program (STAAD PRO)	24 Sep- 4th Oct	3rd Year B.Tech	144	
ISGPP	26th Nov- 14th Dec	Nirman Sahayak and Jr. Engineer from Gram Panchayat	65	

Industry visit report

Name of the organization	Period
INSDAG	**30th and 31st October**

Student activities

Students' achievement

Name	Student's Achievement/Awards/GATE/M.Tech/Ph.D PURSUING	Date
Kunal Ghosh	**GATE**	**2019**

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Student publication

Sl.No.	Department	Paper Name	Student name	Faculty Mentor	Details
1	Civil Engineering	Experimental study on the effect of hooked end and crimped steel fibre in steel fibre reinforced concrete using packing density method	Souvik Sharma	Anasuya Mondal	NCSTCS

Summer/winter

Name of the org	Period
PWD Barrackpur PWD (Roads)Malda South Eastern Cold Field LTD PWD Coachbihar, Tista Bridge Conctruction , Lanco Indratech , Rvnl , PWD South Kolkata , Gamon India , PWD Barrackpur , Z-tech , PWD Tripura	SUMMER
Rites Ltd , Coal India , CCCL , Housing Directorate , PWD Kolkata , I&WD , Triveni Construction Pwd barrackpur , Simplex Infrastructures Ltd. RVNL , KMDA	WINTER

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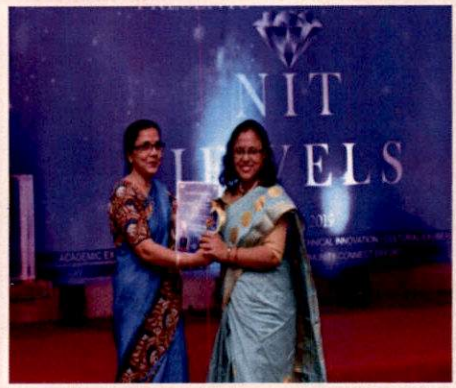
5.2.5 *Information Technology Department*

About Department:

The Information Technology Department of this premier Institute equips the students with practical based knowledge modeled upon developments in software technology and its application in the relevant fields, both traditional and emerging. The students gain industry oriented knowledge for their preparation to meet the demands in the competitive market.The department started its journey in the year 2001 with 60 intake. The department is currently NBA accredited.

Faculty Achievements

1. Dr. (Prof.) B. K. Medya, professor and HOD of IT dept received NIT JEWEL for successfully completed 10 years.
2. Mr. Anirban Bhar, Assistant professor of IT dept received NIT JEWEL for successfully completed 10 years.
3. Ms. Sujata Kundu, Assistant professor of IT dept received NIT JEWEL for successfully completed 10 years.
4. Ms. Shyamapriya Chowdhury Assistant professor of IT dept received NIT JEWEL for successfully completed 10 years.



Faculty publication

Journal (no)	Conference(no)	Book chapter(no)	Book(no)
7	2	0	0

Seminar/ Workshop Attended by Faculty (July 18-Jun19)

Name of the faculty	Type of the course	Name of the course	Organized by	Venue	Duration
Ms. Shyamapriya Chowdhury	Workshop	Workshop on Robotics	IIT Bombay	BPPIMT, Kolkata	2 Days (20.08.2019 - 21.08.2019)

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Ms. Suchismita Maiti & Mr. Soumya Bhattacharyya	Workshop	Workshop on Outcome Based Learning	GNIT, JIS Group	GNIT, Sodepur	3 Days (19.07.2018 - 21.07.2018)
Ms. Tamasree Biswas	FDP	FDP on Student Induction Program	AICTE	SNU, Kolkata	3 Days (18.07.2019 - 20.07.2019)
Dr. B K Medya	Workshop	AWS Initiate in Kolkata	Amazon	JW Marriot, Kolkata	1 Day (02.08.2019)
Dr. B K Medya	Workshop	Workshop on Robotics	IIT Bombay	BPPIMT, Kolkata	1 Day (19.08.2019)
Dr. B K Medya	Workshop	'MHRD Innovation Cell' at AICTE HQ	AICTE	New Delhi	1 Day (30.08.2018)
Mr. Soumya Bhattacharyya	Energy Conclave	Workshop on Sustainability and Resources Security	BCC&I & JIS Group	ITC Sonar, Kolkata	1 Day (29.08.2019)

Seminar/workshop/events organized (July 18-Jun19)

Name of the event /seminar/conference /workshop/training organized	Date/Duration	Target Audience	Number of Participants	Remarks/Notes
Group discussion on "Impact of Technology on Jobs"	08/02/2019	students of IT 2nd and 3rd year	60	Group discussion generates a creative thinking in all participants. Something beyond theobvious answer and solution to a specific problem

Quiz	18/03/2019	students of IT 1st year	30	To encourage the students to look beyond their textual knowledge and establish a relationship between theory and application of the concepts.
Debate Competition	16/04/19	IT2 and IT3	28	Preparing and delivering of argumentation offers students the opportunity in critical thinking, development of their academic research skills, improvement in their communication abilities, solution of problems in a creative way, and an increase in their self-confidence.
Industrial Seminar on Cloud Computing & Its security	03/04/19	IT 3rd Year	56	By Mr. Dev Baul, Chief Executive Officer, Webel Electronics Infrastructure Development Limited
Seminar on Innovation with Data	12/07/2018	IT2 and IT3	70	By Mr. Roger Raphael, IBM, Silicon Valley

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Seminar/workshop/events organized (July 18-Jun19)

Name of the event /seminar/conference /workshop/training organized	Date/Duration	Target Audience	Number of Participants	Remarks/Notes
Group discussion on "Impact of Technology on Jobs"	08/02/2019	students of IT 2nd and 3rd year	60	Group discussion generates a creative thinking in all participants, something beyond the obvious answers and solution to a specific problem
Quiz	18/03/2019	students of IT 1st year	30	To encourage the students to look beyond their textual knowledge and establish a relationship between theory and application of the concepts.
Debate Competition	16/04/19	IT2 and IT3	28	Preparing and delivering of argumentation offers students the opportunity in critical thinking, development of their academic research skills, improvement in their communication abilities, solution of problems in a creative way, and an increase in their self-confidence.
Industrial Seminar on Cloud Computing & Its	03/04/19	IT 3rd Year	56	By Mr. Dev Baul, Chief Executive Officer, Webel Electronics

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security				Infrastructure Development Limited
Seminar on Innovation with Data	12/07/2018	IT2 and IT3	70	By Mr. Roger Raphael, IBM, Silicon Valley

Seminar: IT department organised one industrial seminar on "Innovation with Data" on July 12, 2018. Speaker of the seminar was Mr. Roger Raphel, IBM master inventor.

Industry

Name of the Organization	Period
Data System Control and Communication Private Limited Sector-V, Saltlake.	12th February, 2019 (1 Day)
TCS Innovation Lab, Kolkata	16/07/2018 (1 Day)

Student Activities

Students' achievement

Name	Student's Achievement/Awards/GATE/M.Tech/Ph.D PURSUING
Srikant Kumar	M. Tech, IIIT, Bhubaneshwar
Deblina Mondal	MBA, IILM, Delhi
Annwesha Roy	MBA, NIT, Durgapur

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Farhat Anjum	M. Tech, MAKAU T
Nikhar Gaurav	MS, Indiana University, Bloomington, USA
Dhiman Chakraborty	PhD, Saarland University, Saarbrucken, Germany
Tanusree Mukherjee	M.Tech, IIEST, Shibpur
Sanghamitra Kanjilal	MS, Haub School of Business, Saint Joseph's University, Philadelphia
Asish Basak	M.Tech , Jadavpur University
Swagatika Swain	MBA, IEM, Saltlake
Payal Das	MBA, Indus Business Academy, Bangalore

Sl.No.	Department	Paper Name	Student name	Faculty Mentor	Details
1	IT	An Efficient Framework to Identify Quality Attributes and to Provide Flexibility in Development	Shimontitni Majumder, Suchandra Chakraborty	Mr. Anirban Bhar	International Journal of Engineering Sciences & Research Technology, ISSN : 2277-9655
2	IT	Choice Based Curriculum Design	Krishnendu Bhattacharjee, Aarigin Hazra	Ms. Tamasree Biswas	International Journal of Computer Trends & Technology, ISSN : 2231-2803
3	IT	Image Mining Techniques for	Krishnendu Bhattacharjee,	Ms. Tamasree Biswas	International Journal of Enhanced

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		Efficient Searching of Images from Internet	Aarigin Hazra, Arnab Ghosh		Research in Science Technology & Engineering, ISSN : 2319-7463
4	IT	Artificial Intelligence Controlled Army	Ashutosh Shukla	Ms. Tamasree Biswas	National Conference on Advance Computing Communication & Devices
5	IT	Traffic Management & IoT	Sanwar Hussain, Parama Sarbajana	Ms. Tamasree Biswas	National Conference on Advance Computing Communication & Devices
6	IT	An Approach for Conglomeration of the Existing Library System with Modern Cryptographic Approach	Babej Chattoraj	Ms. Tamasree Biswas	International Journal of Information Resource Management

Name of the Organization	Period
Globsyn Finishing School	1 Month (Aug-Sept 2018)
Webel Informatics Limited	1 Month (Aug-Sept 2018)
Microsoft Image Academy	1 Month (Sept 2018)
National IT and Cyber Security Research Association	1 Month (July 2018)
Bengal Chemicals & Pharmaceuticals Ltd.	1 Month (Aug-Sept 2018)

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5.2.6 Electronics And Instrumentation Department

About the Department :

EIE DEPARTMENT is the most Technically Innovative Department of Narula Institute of Technology. The department has started its journey from 2010 and offers the B. Tech degree in Electronics and Instrumentation Engineering.
The subject is the amalgam of both the software and core subjects. So, the department is very successful to offer the placements in both the sectors to all the pass out students.
The department is very competent to execute innovative projects and won many project competitions in an around West Bengal. The faculties have high national and international exposures and have more than 100 research publications. The students of EIE Department have published more than 70 research papers till date.
The department is very focused to provide quality technical knowledge, enhancing project based technical skills and make them industry ready both for software and core sectors.

A) Faculty achievement:

- Bansari Deb Majumder, Teacher In Charge, EIE, NIT Received the "**Best Mentor Award** " from **Texas Instruments** for Science & Innovation in 2018.
- Bansari Deb Majumder published a research paper "Recent Advances in Multifunctional Sensing Technology on a Perspective of Multi-Sensor System: A Review", IEEE Sensors Journal, Vol. 19, No. 4, February 2019 in IEEE Sensors Journal" and the paper being one of the 25 most downloaded Sensors Journal papers in the months of January and February 2019.
- Bansari Deb Majumder mentored THREE student projects in regional round of AICTE VISWAKARMA AWARDS 2018. She has also mentored ONE student project in National Level Project Competition SRISHTI 2018 in Final Round at Kottayam, Kerala. This is the only project selected from Eastern region of India.

- Dibyendu Sur, Assistant Professor, EIE, NIT **presented paper in Goddard Space Flight Center, NASA, Washington, USA**. He is the only speaker from an Indian institute in the last five years to present a paper in NASA.
- Dibyendu Sur, Assistant Professor, EIE, NIT **submitted his Ph.D. thesis** in 2019 and also completed 10 years in JIS group.
- Dibyendu Sur, Assistant Professor, EIE, NIT got **Travel grants** of 700 Euro fromCommittee on Space Research (COSPAR)and also from International Space Science Institute (ISSI), Bern, Switzerland for second team meeting on February 4-8, 2019 from European Space Agency.

- Susmita Das, Assistant Professor, EIE, NIT has **enrolled for Ph.D** in Indian Institute of Information Technology (mentored by IIT Kharagpur) in 2018.

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- Susmita Das, Assistant Professor, EIE, NIT has received the **best mentor** medal in INNOMPICS 2018.
- Susmita Das, Assistant Professor, EIE, NIT has attended the 4th **Asian Prosthetic and Orthotic Scientific Meeting in Thailand** supported by Mahidol University and International Society of Prosthetics and orthotics.

B) Faculty

Journal (no)	Conference(no)	Book chapter(no)	Book(no)
2 (SCI INEDEXED)	11 (International and National)	1	NIL

C) Seminar/ Workshop attended by faculty (July 18-

Name of the faculty	Type of the course	Name of the course	Organized by	Venue	Duration
Bansari Deb Majumder	Workshop	SCADA Application in Power System	Gurunank Institute of Technology	Sodepur, Kolkata	24th April 2019
Dibyendu Sur	Workshop	Elsevier Author Workshop	COSPAR and JPL, NASA	Pasadena Convention Center, US	16 July, 2018
Dibyendu Sur	Seminar	Seminar on "IOT: Bringing automation for better tomorrow	Telecom Regulatory Authority of India (TRAI) Regional Office Kolkata	Hotel The Park, 17 Park Street, Kolkata-700016	14 September, 2018
Susmita Das	Workshop	Workshop on Research Methodology	Young Scientist Congress in Nepal	International Science Community Association, 2019.	Feb, 2019

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D) **Seminar/workshop/events organized (july 18-Jun19)**

Name Of The Event /Seminar/Conference /Workshop/Training Organized	Date/Duration	Target Audience	Number Of Participants	Remarks/Notes
Discussion On " Recent Trends In Core- Industries And UPSC Examinations" By ALUMNI Of EIE Dept	06 August 2018	EIE Students	82	The Event Was Attended By Students Of Third And Fourth Year
Two Weeks Workshop On " Industrial Design Tools: AUTOCAD, MATLAB & Labview " For 2nd And 3rd Year Students	3rd To 13th July 2018	EIE Students	90	
Innovative Project Competition	29th June And 17th July 2018	EIE Students	05	The Have Presented Prototype Of Two Projects 1. SMART GLOVES 2. Online Heart Beat Monitoring System On 17thJuly They Have Attended Open Discussion Forum On How To Presentation About Start-Up Project Held At

				HO
The Overview Of Core Industry	08.08.2018	EIE Students	200	
Key Areas Of Instrumentation Domain	09.08.2018	EIE Students	55	
Parents Teacher Meeting	31st October 2018	EIE Students	50	
WALL MAGAZINES On " IOT In Engineering: Biomedical Engineering, Robotics And Industrial Automation"	April 25, 2019	EIE Students	50	
Workshop On Innovative Project Development	March 1, 2019	EIE Students	110	
Biomedical EquipmentsIn Industries	April 9, 2019	EIE Students	80	Mr.Harish Krishna And Mr.Anbarasan, Harvey Biomedical Pvt Ltd
Arduino Based Embedded Systems &Robotics With IOT	April 3, 2019	EIE Students	75	Technical Experts,OGMA Tech Lab
Two Weeks Workshop On "Basic Circuit Design Tools: Labview , MATLAB And PLC"	7th To 18thJAN 2019	EIE Students	75	
One Day Workshop On Robotics For School Students In ECSTASY 2019	29thJan 2019	EIE Students	150	

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E) Industry visit report with photo

Name of the organization	Period
MSME Tool room, Bon Hooghly , Kolkata, EIE department has organized an industrial visit at MSME Tool Room -Kolkata on 27th April 2019 for 2nd & 3rd year students at Bonhooghly Industrial Area. The Program outcomes are: 1. Students of EIE have got opportunity to get real-time experience of learning PLC operation, programming, and hardware designing along with the concept of DCS also. 2. The event has got enriched with the knowledge of Embedded system, recent advancement in ARM processors etc. from the expert trainers of MSME. 3. Students have visited the Samsung lab equipped with the latest fabrication and manufacturing instruments. 4. They have also experienced the recent development in the field of 3D printing and CNC machine.	April 27, 2019
Hyper Xchange Department of EIE took initiative for industrial visit to Hyper Xchange at Sector V, Salt Lake on May 2, 2019. Students from first, second and third year visited at that place and observed the interaction between software and hardware in modern day industry. They learned about the drone design techniques and its commercial uses. They also learned about Ios and android app design techniques and how these can be interacted with hardware device maintenance and selling. It was an interactive visit with the	

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industry personnels and it has enriched the knowledge base of the students towards software and hardware combined modern day industry perspectives.	May 2, 2019
PCS Electronics The Program outcomes are: Students of EIE have got opportunity to get real-time experience of learning PLC operation, hardware designing and assembling. The event has got enriched with the presence of PLC manufacturer experts for Siemens and Schneider.	 April 12, 2019

Student activities

Students' achievement

Name	Student's Achievement/Awards/GATE/M.Tech/Ph.D PURSUING	Date
Supravat Roy, Avipsa Basak, Uday Sankar Saha, Sayantan Roy	Team NIT is the winner in the category of "Creative Problem Solving" in the 2nd INNOMPIC Games 2018, held at University of Kuala Lumpur, Malaysia from 27th September-30th September, 2018, by defeating the global competitors like Vietnam, Malaysia, Uzbekistan, Russia and another team from India. Most importantly they have defeated the winner team (Russia) of previous year	27-30 September, 2018
Supravat Roy, Avipsa Basak, Sayantan Mitra, Anismita Paul, Swati Nayna, ArghadipChakraborty	The team won First prize in International Conference on Electrical, Electronics, Computer Science & Civil Engineering (Tech-Meet 2019) under the supervision of Mr.Dibyendu Sur, Assistant Professor, EIE, NIT	April 21, 2019
Shyamal Kumar Mishra, Vijitaa Das	GATE qualified	March 14, 2019

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Vijitaa Das	M.Tech in National Institute of Technology, Calicut	August 1, 2019
Shyamal Mishra	NPTEL Qualified and Second position in India for Highest learning subjects under NPTEL.	August 1, 2018
Sayan Chakraborty, Chaitali Bhattacharya, Shirskak Dutta, Arka Majumder	Qualified for final round of National Level Project competition "Srishti 2019" held at Kottayam, keralaThis is the 6th time the project competition has been organized by Kerala Incubation Centre, State Govt of Kerala. The event was technical collaboration with National Instruments and Math works.	18 th &19th February 2019
Bikram Ray, Raktima Dutta, Roberto Bhowmick, Debmalya Sadhukhan	Participated in Project competition at National Science Day at Adamas University. This was held for all the engineering streams throughout Kolkata area.	28th Feb 2019
Raktim Pratihar, Atmadip Dey, Arka Majumder	Participated in Project competition at National Science Day at MAKAUT, STATE LEVEL PROJECT COMPETITION	28th Feb 2019
	Participated in Robo Ranger in St. Xavier's College	12th Feb 2019
Sourab Ghosh, Ratul Saha	Participated in Tech fest at Jadavpur University, Participated in Project Display at Jadavpur University	28th Feb 2019

Student

Sl. No	Department	Paper Name	Student name	Faculty Mentor	Details
	EIE	Iot Based Technological Solution For Cattle Area And Energy Conservation	Sayan Chakraborty, Trisha Paul	Bansari Deb Majumder	National Conference On Science, Technology &Amp; Communication Skills (Ncstcs 2k19), April 5, 2019
		Development Of Plant Communicator: Monitoring The Parameters	Sourab Ghosh, Ratul Saha	Bansari Deb Majumder	National Conference On Science, Technology &Amp; Communication Skills (Ncstcs 2k19), April 5, 2019

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		Power Panes- The Wave Of Future	Harshit Singh	Bansari Deb Majumder	National Conference On Science, Technology &Amp; Communication Skills (Ncstcs 2k19), April 5, 2019
		Development Of Alcohol Detection System	Pritha Majumder, Anshuman Bhoumik	Bansari Deb Majumder	National Conference On Science, Technology &Amp; Communication Skills (Ncstcs 2k19), April 5, 2019
		Development Of Smart Cultivation System	Debalina Chatterjee, Anwesha Roy, Bonhisikha Ray, Progrya Saha, Rahul Jaiswal, Md. Ather Ali	Bansari Deb Majumder	Inter University Academic Meet 2019, March 31, 2019
		Development Of Iot Based Automated Controlling Of Home Appliances Using Voice Recognition Technique	Aritra Basu, Rishab Roy, Kushal Bhowmick, Trinanjana De, Sagar Gupta, Prit Singh	Bansari Deb Majumder	Inter University Academic Meet 2019, March 31, 2019
		Development Of Gesture Controlled Wheelchair	Papendu Das, Abhijit Seth, Atri Mondal, Harshita Jain, Prakash Kumar Thakur, Souvik Kundu	Bansari Deb Majumder	Inter University Academic Meet 2019, March 31, 2019
		Iot Based Real Time Monitoring Of Parameters Of Incubator Chamber	ParamitaSaha, Shreya Paul,	Bansari Deb Majumder	Inter University Academic Meet 2019, March 31, 2019

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			Jasmine Firdaus,		
		Automated Water Level And Moisture Controller	Chaitali Bhattacharyya, Payosmi Sen	Bansari Deb Majumder	Inter University Academic Meet 2019, March 31, 2019
		Smart Coconut Tree Climber With Cutting Machine	Portia Mukherjee, Sourav Pramanik, SoumyaSau, Saikat Pal, Gaurav Tarafdar, Deep Narayan Daw	Bansari Deb Majumder	Inter University Academic Meet 2019, March 31, 2019
		Iot Based Technical Solution For Cattle Area	Trisha Paul, Arka Chanda, Arunava Bose, Sayan Chakraborty	Bansari Deb Majumder	Inter University Academic Meet 2019, March 31, 2019
		Live Aqi Map Like Google Traffic Map For The Use Of Varius Stakeholders	VarunSurekha, Saugata Nag, Samir Ghosh, Sukhman Kaur	Anita Biswas	Inter University Academic Meet 2019, March 31, 2019
		Traffic Management Using Image Processing	Varun Surekha, Saugata Nag, Samir Ghosh, Sukhman Kaur	Anita Biswas	Inter University Academic Meet 2019, March 31, 2019
		Solar Energy measurement system using arduino	SusmitaMukherjee,PallabiNaskar,SushilKumar,SwarnaliSaha,Joy Roy Chowdhury,Saptaparna Banerjee	Athena Chakraborty	Inter University Academic Meet 2019, March 31, 2019
		Eeg Controlled	Supravat Roy,	Susmita Das	Inter University Academic Meet 2019, March 31,

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		Limb Movement	Avipsa Basak, Arghadip Chakraborty, Anismita Paul,Swati Nayna, Sayantan Mitra		2019
		Biogenic Limb Generation	Attrayee Sinha, Rituparna Dey, Archita Chakraborty	Susmita Das	Inter University Academic Meet 2019, March 31, 2019
		Age Prediction	Anirban Basu, Rumeli Das, Nayan Acharjee	Susmita Das	Inter University Academic Meet 2019, March 31, 2019
		Study Of Artificial Intelligence	Sayan Chakraborty	Susmita Das	Inter University Academic Meet 2019, March 31, 2019
		Energy Generation Using Muscle Activities	Soumya Dipta Boral, Soutrik Karmakar, Aniket Chakraborty, Souvik Ghosh	Susmita Das	Inter University Academic Meet 2019, March 31, 2019
		Sunlight Detector	Progya Saha, Anwesha Roy, Debalina Chatterjee, Banhnisikha Ray	Dibyendu Sur	Inter University Academic Meet 2019, March 31, 2019
		Iot Devices For Tracking Csr Assets	Arka Majumdar, Debalina Chatterjee, Raktim Pratihar,	Dibyendu Sur	Inter University Academic Meet 2019, March 31, 2019

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			Atmadip Dey, Banhnisikha Ray		
		Cost Effective Parking Solution	Atmadip Dey, Arka Majumdar, Raktim Pratihar, Debalina Chatterjee, Banhnisikha Ray	Dibyendu Sur	Inter University Academic Meet 2019, March 31, 2019
		Automatic Pothole Detection While Driving	Banhnisikha Ray, Atmadip Dey, Raktim Pratihar, Debalina Chatterjee, Arka Majumdar	Dibyendu Sur	Inter University Academic Meet 2019, March 31, 2019
		Smart Automated Vault In Banking Sector	Neha Mukherjee, Akashneel Dutta, Ahana Sengupta, Akash Das, Sananda Das, Hiranjit Pal	Dibyendu Sur	Inter University Academic Meet 2019, March 31, 2019
		Online Automobile Medical Store	Uday Sankar Saha, Manish Guha, Nistha Gupta, Aparna Das, Alivia Bose, PoonamVerma	Dibyendu Sur	Inter University Academic Meet 2019, March 31, 2019
		Sniper Car	Uday Sankar Saha, Manish Guha, Nistha Gupta, Aparna Das, Alivia Bose, PoonamVerma,	Dibyendu Sur	Inter University Academic Meet 2019, March 31, 2019

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		Smart Light Using Cctv	Raktim Pratihar, Atmadip Dey, Arka Majumdar, Debalina Chatterjee, Banhnisikha Ray	Dibyendu Sur	Inter University Academic Meet 2019, March 31, 2019
		Stop Noise Pollution From Honking	Debalina Chatterjee, Atmadip Dey, Raktim Pratihar, Arka Majumdar, Banhnisikha Ray	Dibyendu Sur	Inter University Academic Meet 2019, March 31, 2019
		A Smart Hand Glove Interpreter	Annasha Purohit, Anwesha Ghosh, Bichitrita Bhowmick, Aritra Dwibedi, Pranjal Majumdar, Kushal Das	Dibyendu Sur	Inter University Academic Meet 2019, March 31, 2019
		Sunlight Tracker: An Innovative Approach For Alternate Power Generation In Rural Areas	Progya Saha, Anwesha Roy, Debalina Chatterjee, Banhnisikha Ray	Dibyendu Sur	Inter University Academic Meet 2019, March 31, 2019
		Indian Regional Navigation Satellite System (Irnss)	Banhnisikha Roy, Raktim Pratihar	Dibyendu Sur	National Conference On Science, Technology &Amp; Communication Skills (Ncstcs 2k19), April 5, 2019
		Overview Of Navigation Satellite All Over The World	Raktim Pratihar, Banhnisikha Roy,	Dibyendu Sur	National Conference On Science, Technology &Amp; Communication Skills (Ncstcs 2k19), April 5, 2019
		Iot Based Mind	Supravat Roy,	Dibyendu Sur	International Conference

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		Controlled Bot	Avipsa Basak, Sayantan Mitra, Anismita Paul, Swati Nayna, Arghadip Chakraborty		On Electrical, Electronics, Computer Science & Civil Engineering (Tech-Meet 2019)
		Online Medical Care Unit Using Iot Based Photoplethysmogram For Rural Areas	Arka Majumdar, Atmadip Dey, RaktimPratihar	Dibyendu Sur	12th All India Peoples' Technology Congress, 16-17 February, 2019
		Implementation Of Solar Tracker Using Light Sensitive Automated Movement In Rural Areas	Anwesha Roy, Progya Saha, Debalina Chatterjee, Banhnisikha Ray,	Dibyendu Sur	12th All India Peoples' Technology Congress, 16-17 February, 2019
		Iris Recognition Technology	Anwesha Roy, Progya Saha, Banhnisikha Ray And Debalina Chatterjee,	Dibyendu Sur	12th All India Peoples' Technology Congress, 16-17 February, 2019

Summer/winter training :

Name of the organization	Period
DRDO, Tezpur by RaktimPratihar, EIE 4th year student	July 2019
MSME Tool room Bon Hoogly , Kolkata	April 27, 2019
National Atmospheric Research Laboratory, Tirupati, Andhra Pradesh	Selected, July 12, 2019
Hyper Xchange	May 2, 2019

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5.2.7 Mechanical Engineering Department

Faculty achievement :

Faculty publication :

Journal (no)	Conference(no)	Book chapter(no)	Book(no)
4	1		

Seminar/ Workshop attended by faculty (July 18-

Name of the faculty	Type of the course	Name of the course	Organized by	Venue	Duration
Dr. Sumit Chabri, Associate Prof. and HOD Mr. Ankesh Samanta, Asst. Prof. Mr. Akhtarujjaman Sarkar, Asst. Prof. Mr. Arghya Gupta, Asst. Prof. Mr. Soumojit Dasgupta, Asst. Prof.	Conference	National Conference on the Theme of "Indian Higher Education: Quality Assurance, Accreditation & Ranking"	EPSI, India	Hotel Hindustan International, Kolkata	1 day
Mr. Soumojit Dasgupta Assistant Professor Mechanical Engg.	Conference	NASSCOM International SME Conclave	NASSCOM	Biswa Bangla Convention Centre, Newtown, Kolkata	10th & 11th January, 2019
Dr. Amit Datta, Associate Professor	Seminar	Seminar on "Digital Pedagogies": The Learner's Future			24/04/2019

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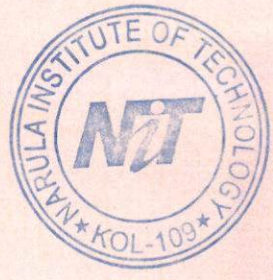
Seminar/workshop/events organized (July 18-Jun19)

Name of the event /seminar/conference /workshop/training organized	Date/Duration	Target Audience	Number of Participants
Inter-college competition "Quick Witted, 2k18"on Engineers' Day Celebration	15 th September 2018	Students	60
Recent trends in Industry: Role of fresh engineers and Industry expectation	25th April, 2019	Students & Faculties	100
Green Polymer Composite and its Applications at Dr. M.N. Dastur School of Materials Science and Engineering, IIEST-Shibpur	25th July, 2018	Students & Faculties	30
Poster Presentation Competition	29th August, 2018	Students	50

Industry

Name of the organization	Period	Report
Electrosteel Castings Ltd.	09-03-2019	The Mechanical Engineering students from 2nd year of Narula institute of Technology went on an Industrial visit to Electrosteel Castings Limited at Khardah . At the beginning, the students were given a hearty welcome and were updated on the various engineering facilities and domain of service present in the company through a PowerPoint presentation.

		Gradually the managers of respective engineering departments guided the students to their shop floors and discussed in details about the various production operation and engineering. Students have visited the ETP unit. The plant deals with water treatment. They had also visited the area where raw materials are stacked and were told how sintering process is done.
Mukesh Training Academy, Kestopur, Kolkata	05-04-2019, 06-04-2019, 27-04-2019	The Mechanical Engineering students from 3rd year of Narula institute of Technology went on an Industrial visit to Mukesh Training Academy, Kestopur, Kolkata – 700059. At the beginning, the students were given a hearty welcome and were updated on the various engineering facilities and domain of service present in the company through a PowerPoint presentation. Gradually the managers of respective engineering departments guided the students to their shop floors and discussed in details. The students were exposed to practical operations which will bridge the gap between theoretical and practical knowledge.



Student activities

Summer/winter training:

Name of the organisation	Period
Metal And Steel Factory, Ichapore	20-12-2018 to 03-01-2019
Chitranjan Locomotive Works	23-12-2018 to 18-01-2019
Diesel Loco Shed,Barddhaman	27-12-2018 to 11-01-2019
Carriage And Wagon Workshop	01-01-2019 to 22-01-2019
Hindustan Aeronautics Limited	10-02-2019 to 23-01-2019
Britannia Engineering Limited	15-01-2019 to 31-01-2019
Texmaco Rail and Engineering Ltd. Hindustan Aeronautics Limited	14-05-2019 to 13-06-2019 24-06-2019 to 07-07-2019
Electrosteel Castings Limited	18-06-2019 to 03-07-2019

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5.2.9 Computer Application Department

Achievement

- Under mentorship of **Ms Subhasree Bhattacharjee** 18 1st year students passed NPTEL course on "Introduction to programming in C".
- Under mentorship of **Dr. Sanjay Goswami** one MCA 3rd year student Ms. Devlina Das passed NPTEL course on "Joy of Computing using Python", with 73.5/75 marks.
- Under mentorship of **Dr. Sanjay Goswami** one MCA 3rd year student Mr. Saumya Chakraborty passed online course on "Programming with Python",from Internshala.

Faculty publication

Dr. Sanjay Goswami et al published a paper "Emergency Restoration based on Priority of Load Importance using Floyd-Warshall Shortest Path Algorithm", PaperID-24, in ICCACCS 2018 held at Narula Institute of Technology on 23-24 November' 18.
Dr. Sanjay Goswami et al published a paper "Quantitative Structure Activity Relationship (QSAR) study of some DNA –intercalating anticancer drugs", PaperID-30, in ICCACCS 2018 held at Narula Institute of Technology on 23-24 November' 18.
Dr. Sanjay Goswami et al published a paper "To Explore Compounds as Tuberculosis Inhibitors – A Combination of Pharmacophore Modeling, Virtual Screening and Molecular Docking Studies", PaperID-31, in ICCACCS 2018 held at Narula Institute of Technology on 23-24 November' 18.
Ms Sahana Das has been awarded best paper in ICCACCS 2018 held at Narula Institute of Technology on 23-24 November' 18.
Accepted: **Dr. Sanjay Goswami** et al, Application of K-Means Clustering to identify village clusters to draw electricity from distributed solar generating plants, PaperID-24918907, 3rd Regional Science & Technology Congress Southern Region, 2018.
Accepted: **Dr. Sanjay Goswami** et al, Application of Data Mining Techniques and Bioinformatics in Drug Discovery, PaperID - 72681059, 3rd Regional Science & Technology Congress Southern Region, 2018.

Journal (no)	Conference(no)	Book chapter(no)	Book(no)
	5		

Seminar/workshop/events organized (july 18-Jun19)

Name of the event /seminar/conference /workshop/training organized	Date/Duration	Target Audience	Number of Participants	Remarks/Notes
Workshop	01.11.18	MCA	40	Students are able to understand the latest technology used for developing the software

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Student activities

Students' achievement

Name	Student's Achievement/Awards/GATE/M.Tech/Ph.D PURSUING	Date
Ms Devlina Das	Qualified NPTEL Course on " The joy of computing using Python" with 98% marks.	**Nov'18**
Mr. Saumya Chakraborty	Passed "Programming with Python",from Internshala	**Nov'18**

Student publication ::

Sl.No.	Department	Paper Name	Student name	Faculty Mentor	Details
1	**MCA**	Emergency Restoration based on Priority of Load Importance using Floyd-Warshall Shortest Path Algorithm	Paushali Majumder	**Sanjay Goswami**	International conference ICCACCS 2018, 23-24 Nov'18,
2		Quantitative Structure Activity Relationship (QSAR) study of some DNA –intercalating anticancer drugs			

Name of the org	Period
NIELIT	21.07 .18 to 21.08.18
NIVT	20.06.18 to 17.07.18
Webtech Lab	2006.18 to 17.07.18

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5.3 Result Publication & Analysis

Evaluation and assessment

After examination answer scripts were sent for central scanning facility for scanning and upload to Digital Valuation Server (DVS). The scanning and uploading was done through an external agency. All logistic operation for distribution and collection of hard copy answer scripts were done by staff under department of COE

All faculty were provided with separate login ID and password for access to the DVS system. Evaluation of all scripts were done by the faculty in online mode using their laptop or PC client at Compute Lab after login to the integrated examination portal. The faculty were provided online with scanned answer script, question paper with section, sub-section and number break-ups. The faculty were also provided with categorized annotation facility and answer key. Marks were awarded by the faculty for each question number only. The internal marks were directly entered online by respective faculty from the logins provided to respective departments. The tabulation and result processing were automated.

After result processing, TR sheets were sent by the external agency vide email to COE and after verification consent was given for online result publication. After online publication, semester grade cards of all students were printed at department of COE from the integrated examination portal for distribution to the students.

Evaluation of Theory Papers (70 marks)

All appointment for examination of answer scripts were awarded to external faculty. After examination answer scripts were manually scanned and uploaded to the main server. The external faculty checked each answer script and entered marks awarded for each question. All evaluation was carried out by the examiners with annotations in red color by accessing the DVS system using internet through separate login IDs for each Examiner. Tabulation was completely automated.

Scrutiny was completely automated using the Digital Valuation System (DVS).

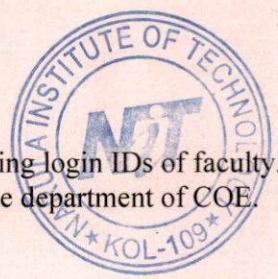
For distribution to Head Examiners, 10% of the answer script packets were randomly selected by the DVS and mapped toHead Examiners. All such re-evaluation was carried out by the Head Examiners with annotations in green color by accessing the DVS system using internet through separate login IDs for each Head Examiner.

Internal Marks for Theory Papers (30 marks)

The internal marks were awarded by the internal faculty for the respective courses conducted by them as follows:

Average of two Slot Tests: 15 marks
Assignment & Quiz: 10 marks
Attendance: 5 marks

All marks were entered in the Examination Portal from the department using login IDs of faculty. A printout of all marks entered was taken out from the faculty login and submitted to the department of COE.



Evaluation of Practicals / Sessionals (100 marks)

For the Semester Examination of Practicals / Sessionals, external examiners were appointed.

In the semester examination of each laboratory practical course, the course teacher had assigned experiments to be conducted by groups of 4 or less number of students after holding a lottery. The assessment of the student performance for experiment was done in consultation with the external examiner (40 Marks). Viva-voce was conducted in presence of the external faculty and the course teacher. The assessment of student performance in viva-voce was done by each internal faculty in consultation with the external faculty (20 marks).

The course teacher had awarded the marks for student performance in laboratory classes based on the Continuous Evaluation sheets for each student (40 Marks).

For Sessional items where the formal Institutional contact hours are not specified, (viz. Online courses, Internships, Co-curricular/Extra-curricular activities etc.), or there are no formal End-semester examination of the written kind, (viz. Comprehensive Viva-voce, Seminar, Industrial Visits, etc.), an External Expert of the relevant field was appointed. For all items under these categories, assessment of student performance in viva-voce was done by the internal faculty in consultation with the external expert (100 marks).

All marks were entered in the Examination Portal from the department using login IDs of faculty. A printout of all marks entered was taken out from the faculty login and submitted to the department of COE. A summary of evaluation for theory papers has been given below.

Summary of Evaluation of Theory Papers for Session 2018-19

Description	ODD Semester	EVEN Semester
Number of Answer scripts	15440	15320
Number of Evaluators (External)	65	65
Number of Head Examiners (Internal)	30	30

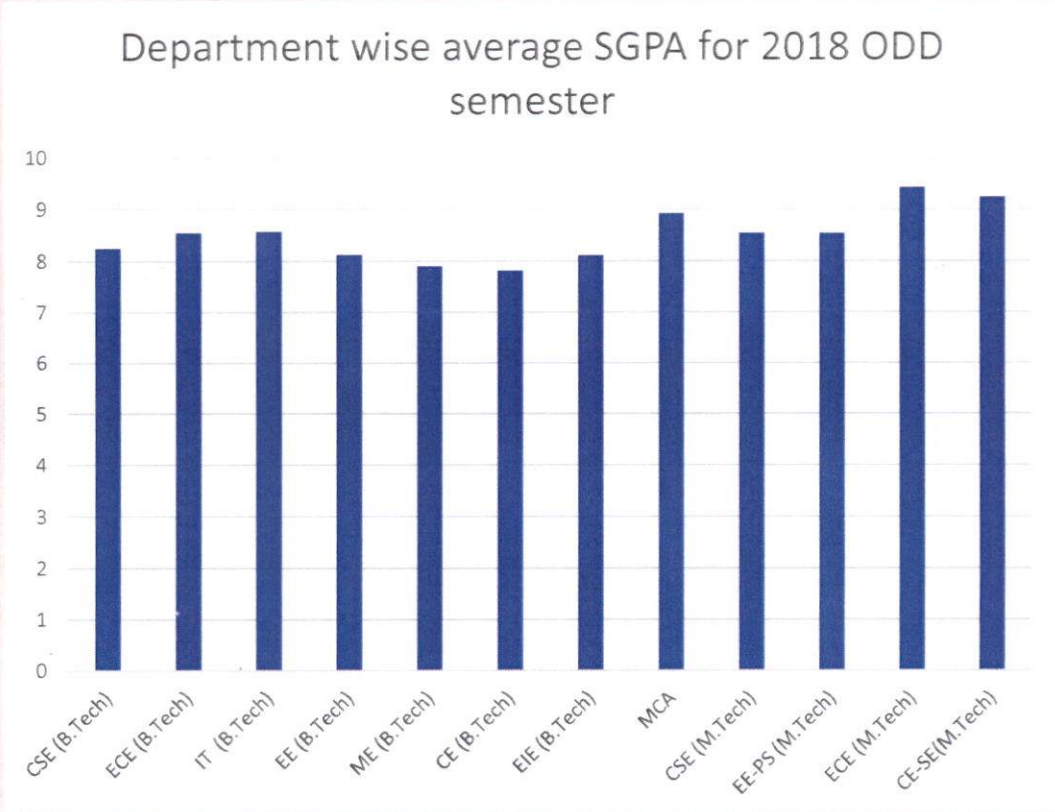
Result Publication

Result Processing was automated through an internet enabled server using a software supported by an external agency. After result processing, TR sheets were sent by the external agency vide email to COE. The result from the TR sheets were verified and summarized at department of COE. Before publication of results of each semester, a meeting of the Board of Examination was conducted and the summary of the results were discussed. After verification consent was given to the external agency for online result publication. After online publication, semester grade cards of all students were printed at the department of COE and distributed to the students.

Result Analysis

Department wise SGPA analysis of ODD and EVEN semester is presented here.

The average SGPA of the college for odd semester 2018 is 7.75.



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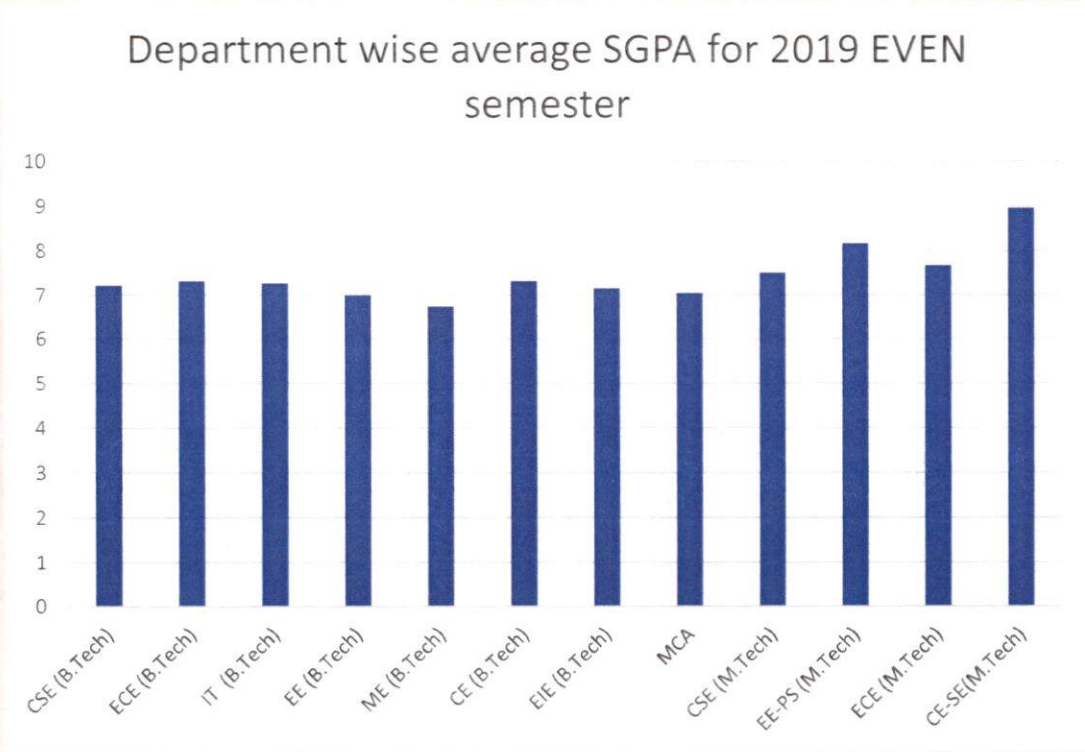
The average SGPA of the college for even semester 2019 is 8.49.



Average Pass percentage of final year students:

Student Appeared	Student Passed	Pass Percentage
748	736	98.40%

Grievances Reported by Students

Answer Script Scrutiny by Students

Notices inviting application for post-publication scrutiny (PPS) from students were issued within 7 days of publication of result. Students not satisfied with the grades, could apply for scrutiny of answer script of specific subjects by filling up a prescribed format and submitting the same within a time window specified in the notice. In presence of the faculty who scrutinized the answer scripts after evaluation, students were permitted to scrutinize an answer script.The details regarding students who submitted PPS applications in the academic year 2018-19 are given below.

Description of Parameter	ODD Semester	EVEN Semester

Number of Answer Scripts involved in PPS Applications submitted by students	4	3
Number of Answer Scripts where awarded marks changed after scrutiny	2	nil

Review Application and Re-evaluation

Notices inviting application for post-publication review (PPR) from students were issued within 7 days of publication of result. Students not satisfied with the evaluation, could apply for re-evaluation by filling up a prescribed format and submitting the same within a time window specified in the notice. Since all main evaluation was done by an external faculty, the re-evaluation was assigned to an internal faculty. The details regarding students who submitted PPR applications in the academic year 2018-19 are given below.

Description of Parameter	ODD Semester	EVEN Semester
Number of Answer Scripts involved in Review Applications submitted by students	5	5
Number of Answer Scripts where awarded marks changed after Re-evaluation	2	1

Automation of Examination System

The following examination activities were fully automated.

1. Examination Form fill up by students using online portal
2. Attendance approval from HOD was introduced which is automatically approved based on their class attendance.
3. Students can submit examination fees and form online
4. Students can download the admit card from the examination portal
5. List of students appearing in examination is prepared automatically
6. Examination schedule was entered into the online system so that questions can be printed only on that day and at specified time for the transparency of examination.
7. Print day-wise attendance sheet for all examination schedule from the online system.
8. All evaluation was carried out by the examiners with annotations in red color by accessing the DVS system using internet through separate login IDs for each Examiner.
9. Scrutiny was completely automated using the Digital Valuation System (DVS).
10. Re-evaluation was carried out by the Head Examiners with annotations in green color by accessing the DVS system using internet through separate login IDs for each Head Examiner.
11. Internal marks were entered in the examination portal from the department using login IDs.
12. Result Publication

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Chapter 6 Research & Development

International Journal publication in 2018:

Title Of The Paper	Name Of The Journal	Author	Vol	Issue No.	Page Nos.	Impact Factor (if any)
A sequential development towards a unified approach to protein sequence comparison based on classified groups of amino acids	International Journal of Engineering & Technology	Jayanta Pal	7	2	pp. 678-686	
Protein sequence comparison under a new complex representatio n of amino acids based on their physio-chemical properties	International Journal of Engineering & Technology	Jayanta Pal	7	1	pp. 181-184	
Intention aware misbehavior detection for post-disaster opportunistic communication over peer-to-peer DTN	SCI Indexed journal —Peer to Peer Networking and Applications| Springer	Chandrima Chakrabarti	11	6	1-19	1.514
Generic parity	Thomson Reuters	Dr. Saradindu				
generators design	Research Id indexed	Panda				

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using LTEx methodology: A quantum-dot cellular automata based approach	Journal, ISSN - 2228-5059					
Towards modular binary to gray converter design using LTEx module of quantum-dot cellular automata	International Journal of Microsystem Technologies, ISSN - 1432-1858	Dr. Saradin du Panda				
QCA Gray Code Converter Circuits Using LTEx Methodology	Int J Theor Phys, ISSN - 1572-9575	Dr. Saradin du Panda				
Synthesis of standard functions and generic Ex-OR module using layered T gate	Int. J. High Performance Systems Architecture	Dr. Saradin du Panda				
Nanorobotics Control Systems Design â€— A Novel Approach to Breast Cancer Diagnosis and Therapeutics	International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 6 Issue III, UGC Approved , Thomson Reuters Research Id indexed Journal.	Dr. Saradin du Panda				
	International Journal for Research in					

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Nanorobotics Control Systems Design – A Novel Approach to Breast Cancer Diagnosis and Therapeutics	Applied Science & Engineering Technology (IJRASET), Volume 6 Issue III, UGC Approved , Thomson Reuters Research Id indexed Journal., ISSN: 2321-9653	Dr. Saradin du Panda				6.887
Nanorobotics Control System Design – A New Look to Breast Cancer Diagnosis And	International Journal of Creative Research Thoughts (IJCRT), UGC Approved,	Dr. Saradin du Panda				5.97
Therapeutic	Thompson Reuters Research ID Indexed Journal. ISSN: 2320-2882					
Performance Evaluation of Digital Comparator Using Different Logic Styles	IETE JOURNAL OF RESEARCH, 2018, SCI Indexed,Google Scholar, SciTech , Science Citation Index Expanded (Thomson Reuters) SCImago (Elsevier) Scopus (Elsevier) Web of Science (Thomson Reuters), ISSN: 0377-2063 (Print) 0974-780X (Online)	Dr. Saradin du Panda				0.909
III–V super-lattice SPST/SPMT pin						

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switches for THz communication: theoretical reliability and experimental feasibility studies	Springer-Verlag GmbH Germany, ISSN no- 0946-7076	Dr. Maitreyi Ray (Kanjilal)			Page No. 1 -16	1.581
Artificial Neural Networks For Intelligent Communication Systems: A Study	International Journal of Engineering Research in Computer Science and Engineering (IJERCSE), ISSN(Online):2394- 2320	Ms. Sandhya Pattanayak				4.89
Artificial Neural Networks For Intelligent Communication Systems: A Study	International Journal of Engineering Research in Computer Science and Engineering, 2394 - 2320	Sandhya Pattanayak				4.89
QCA Gray Code Converter Circuits Using LTEx Methodology	International Journal of Theoretical Physics, Springer, SCI Journal, ISSN: 0020-7748	Dr. Saradindu Panda				0.964
Autocorrelation based Spectrum Sensing Technique for Cognitive Radio Application	International Journal IEICE Communications express	Sandhya Pattanayak	August 2018		2187-0136	
Development of a Wireless Intravenous Drip Rate Monitoring Device	SCI International Journal of Sensor Networks	Anilesh Dey	August 2018			

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ZnS Quantum Dots Based Voltage-Sensing Light-Emitting Device	International Journal IEEE Sensors Letters	Maitreyi Ray Kanjilal	vol 2	Issue 3	2475-1472	
Design and characterization of asymetrical super-lattice Si/4H-SiC pin photo diode array: a potential opto-sensor for future applications in bio-medical domain	International Journal Microsystem Technologies, Springer-Verlag GmbH Germany	Maitreyi Ray Kanjilal	September 2018		0946-7076	
A View Based Model to Improve Quality Factors during Early Stage of Development	International Journal of Latest Engineering and Management Research (IJLEMR)	Anirban Bhar	Volume 03	Issue 02	ISSN: 2455-4847	(UGC Approved: Sl No : 4766, Journal No : 48163)
A View Based Model to Improve Quality Factors during Early Stage of Development	International Journal of Latest Engineering and Management Research (IJLEMR)	Soumya Bhattacharyya	Volume 03	Issue 02	ISSN: 2455-4847	(UGC Approved: Sl No : 4766, Journal No : 48163)
Statistical analysis of raw in-vivo breast ultrasound echo	International Journal of Tomography and Simulation	Suchismita Maiti	32	1	ISSN: 2319-3336	CESER publication; Indexing: Scopus, CIS etc.

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Protein sequen ce compa rison under a new compl ex repres entatio n of amino acids based on their physio chemical properties	International Journal of Engineering & Technology (IJET)	Soume n Ghosh	Volume: 7	No. : 1,	pp. 181-184	doi: 10.1441 9/ijet.v7i 1.9292, 2018,
A sequential development towards a unified approach to protein sequence comparison based on classified groups of amino acids	International Journal of Engineering & Technology (IJET)	Soume n Ghosh	Volume: 7,	No. : 2,	pp. 678-686	doi: 10.1441 9/ijet.v7i 2.9546, 2018
Support to portable devices with Energy Generation by Lower Limb activities	JMCMS	Susmit a Das	13	1		
On Design and Implementation of an Artificial Lower Limb	IJSWCC, Bentham Science (Scopus indexed)	Susmit a Das	8	2		
Object Gripping With Automated Robotic Arm Movement	IOSR Journal of Electrical and Electronics Engineering	Susmit a Das	13, DOI: 10.9790/ 1676-1302024 851	2		

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Recent Advances in Multifunctional Sensing Technology on a Perspective of Multi-Sensor System: A Review	IEEE Sensors Journal, IEEE Early Access Articles, SCI Indexed	Bansari Deb Majumder	20 Novem ber, 2018			
Tuning and transfer functional modelling of a prosthetic arm	Journal of Computational Methods in Sciences and Engineering	Susmita Das			1-14	
Effect of functionalized metal oxides addition on the mechanical, thermal and swelling behaviour of	Engineering Science and Technology, an International Journal	Jaideep Adhikari, Bhabatosh Biswas, Sumit Chabri, Nil Ratan Bandyapadhya y, Pravin Sawai, Bhairab Chandra	20	8	760– 774	2.018
polyester/jute composites		Mitra, Arijit Sinha				
Mechanical Properties of Metal Oxide Dispersed Jute Fiber Reinforced Polyester Biocomposites	POLYMER COMPOSITE S	Jaideep Adhikari, Bhabatosh Biswas, Sumit Chabri, Nil Ratan Bandyopadhya y, Sudipta Halder, Bhairab Chandra Mitra, Arijit Sinha	DOI 10.1 002/ pc.2 441 0			1.943
Mechanochemical		Anindya Pal,				

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synthesis of nanocrystalline hydroxyapatite from Mercenaria clam shells and phosphoric acid	Biomedical Physics and Engineering Express	Shubhadeep Maity, Sumit Chabri, Supriya Bera, Amit Roy Chowdhury, Mitun Das, Arijit Sinha	3		0150 10	2.897
Study of MRR for EN47 Spring Steel in WEDM	Materials Today: Proceedings	S Banerjee, B Panja and S Mitra	5	2	4283 - 4289	NA
Influence of over-aging and sub-zero temperature rolling on strength-ductility balance in AA6061 alloy	Engineering Science and Technology, an International Journal Publisher: Elsevier	Souriddha Sanyal, Subhranshu Chatterjee, Sumit Chabri, Nandagopal Bhowmik, Arijit Sinha				
Development of an anti-loosening fastener and comparing its performance with different other threaded fasteners. pp. 1793–1801	Sadhana	B Panja and S Das	42	10	1793 - 1801	0.465
—Microsecond Timekeeping to improve Power System Control	AMSE Journals, France, Advances in Modelling C Automatic	A. Chakrabarti,	Vol. 66	Issue 2	ISSN 1240-4535	SCOPUS 1408, pp.

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& Operation	Control (Theory and Applications)					12-27
—Mathematical Model for Diabetes in fuzzy environment with stability analysis	Journal of Intelligent and Fuzzy Systems (SCI/SCOPUS) ISSN-1064-1246 IOS Press, Amsterdam, Netherlands	Mr. Avishek Chakraborty	Accepted	Accepted	Accepted	1.426
—Different Forms of Triangular		Avishek Chakraborty				
Neutrosophic Numbers, De-Neutrosophication Techniques, and their Applications	Symmetry,MDPI (SCI/SCOPUS) ISSN-2073-8994, CODEN:SYMMAM, MDPI , Switzerland		10	8	327	1.256
	Advances in Fuzzy Mathematics	Dr. Sumit Nandi				
Biodiesel from Karanja (Pongamia Pinnata L.) oil using non specific enzyme Candida Antarctica	Chemical Science Review and Letters, ISSN No. 2278-6783, UGC List No.	Sumit Nandi, Rupa Bhattachary ya	7	25	118-121	4.856

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	45864).					
	Rairo – Operation Research, SCI, Scopus, Thompson & Reuters	Avishek Chakraborty				
Comparative Analysis of Manpower Planning	International Journal of Management	Dr. SriparnaGuha	9	2	56-63	8.1920
Digital Manufacturing Process	International Journal of Business & Management	Dr. SriparnaGuha	20	4	43-44	2.97

International Journal publication in 2019:

Name of the faculty	Journal	Citation Index	Whether Elsevier/ Web of Science	Impact factor	Indexed in Scopus/Thompsons & Reuters	Link of the journal in Scopus/Thompsons & Reuters index
CHANDRIMA CHAKRABARTI	Interenational Conference	ACM	Web of Science			
Bansari Deb	Recent	SCI	IEEE	2.56	yes	10.1109/JS

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Majumder	Advances in Multifunctional Sensing Technology on a Perspective of Multi-Sensor System: A Review		Sensor Journal			EN.2018.2882239
Dibyendu Sur	NASA Heliophysics Seminar at Goddard Space Flight Center, Washington DC, US	NA	NA	NA	NA	NA
Dibyendu Sur	Space Weather (Communicated), SCI Indexed	https://agupubs.onlinelibrary.wiley.com/journal/15427390	American Geophysical Union (AGU)	2.89	Yes	http://mjl.clarivate.com/publist_sciex.pdf
Susmita Das	"Tuning and transfer functional modelling of a prosthetic arm ", IOS Press content Library, DOI: 10.3233/JCM-180880.	NA	ESCI	NA	Thompsons & Reuters	NA

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	Journal: Journal of Computational Methods in Sciences and Engineering, pp. 243-256, 2019, 28th Jan					
Ms. Sagarika Chowdhury	IETE Journal of Research	Tailor & Francis (SCI)	Web of Science	0.89	Thompson & Reuters	https://www.tandfonline.com/doi/abs/10.1080/03772063.2019.1571954
Dr.Sandip Chanda	IEI Seriues B Springer	0.48	Y	0.14	Scopous	https://www.springer.com/engineering/signals/journal/40031
Dr. Anilesh Dey	Book Chapter Intelligent Speech signal Processing		Elsevier		Thompsons & Reuters	https://www.elsevier.com/books/intelligent-speech-signal-processing/dey/978-0-12-818130-0
Dibyendu Sur	Asia Pacific Conference of Radio Science	NA	NA	NA	NA	NA

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	2019					
Dr. Sumit Nandi and Dr. Rupa Bhattacharyya	Indian Journal of Natural Sciences	-------	Web of Science	1.265	Formerly Thompson & Reuters	http://www.tnsroindia.org.in/journals.html
Dr. Sumit Nandi (Accepted)	Chemical Science Transaction	-------	Web of Science	0.980	Thompson & Reuters (Under processing)	--------
Mr. Safikureshi Mondal	Journal of Biomedical Informatics	SCI, SCIE, DBLP	Elsevier, Web of Science	2.882	Scopus, DBLP,Thompsons & Reuters	Accepted

1.1 Conference publication in 2018: (July to December)

Name of the Conference	Title of the paper	Author(s)	Venue	Date	Proceedings with ISBN No. (if any)	Type of participn	Awards (if any)
COSPAR General Assembly, Conducted by California Institute of Technology, home of JPL, NASA	Development and validation of a neural network based model to observe the impact of geomagnetic storm on TEC at Lucknow during	Dibyendu Sur	Pasadena Convention Center, Pasadena, Los Angeles, US	14-22 July, 2018		Author	International

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	2015-2016						
2nd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES 2018),	Protection of Power Electronic Switches in a VSI against Over-Current and Shoot-Through Faults	V. Choubey, J. Simlai, T. Ghosh, A. Mitra,	Electrical Engineering Department, Delhi Technological University, Delhi	22nd to 24th October, 2018	Electronic ISBN: 978-1-5090-0035-7, Print on Demand (PoD) ISBN: 978-1-5090-0036-4, DOI: 10.1109/CIEC.2016.7513752, pp. 343-347	Author	2nd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES 2018),
Springer, Proceedings of ICCACCS 2018, accepted in Lecture Notes in Electrical Engineering, Springer	, "Detection of Black Hole Attack in Delay-Tolerant Network", accepted in Lecture Notes in Electrical Engineering,	Chandrima Chakrabarti, Ananya Banerjee, Anirban Das, Souradip Ganguly, Somraj Mukherjee, Rohan Dutta, Jagriti Chourasia,		23-24 Nov. 2018			
Accepted for Springer Lecture Note on Electrical Engineering, Proceedings of ICCACCS 2018,	"MVTRNG: Majority voter based crossed loop Quantum True Random	Arindam Sadhu, Kunal Das, Debashis De, Maitreyi Ray		Springer, 23-24 Nov. 2018			

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	number Generator",	Kanjilal					
Accepted for Springer Lecture Note on Electrical Engineering, 2nd International Conference ICCACCS-2018, Springer	"Physical Proof and Simulation of Ternary Logic Gate in Ternary Quantum Dot Cellular Automata",	Puspak Pain,Arindam Sadhu, Kunal Das, Maitreyi Ray Kanjilal		23-24 Nov. 2018			
2nd International Conference ICCACCS-2018, Springer	Four Directional Detection Based Gaussian Noise Removal, Accepted for Springer Lecture Note on Electrical Engineering,	Shubhendu Banerjee,		, 23-24 Nov. 2018			
2nd International Conference ICCACCS-2018, Springer,	Role of Sensor Network in Health Monitoring, Accepted for Springer Lecture Note on Electrical Engineering,	Aritri Chakraborty, Koushik Karmakar, Ananya Banerjee,		23-24 Nov. 2018			
Springer Lecture Note on Electrical Engineering, 2nd International Conference ICCACCS-2018, Springer,	Reliability of Online Shopping Websites,	Debjani Chakraborty, Ananya Banerjee, Akash Sengupta,		23-24 Nov. 2018			
15th International Symposium on Equatorial Aeronomy,		Dibyendu Sur	Physics Research Laboratory,	22-26, October, 2018			

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ISEA-2018,			sponsored by ISRO				
2nd International Conference on Computational Advancement in Communication Circuit and System (ICCACCS-2018), Springer Conference	"Power Grid Generation with Tectonic mechanism Wind Energy resources",	Pratyusha Biswas Deb, Susmita Das, Arnima Das, Ronojit Bose, Aritra Das, Prof. Dr. Maitreyi Ray Kanjilal	Narula Institute of Technology, Kolkata,	23-24th November 2018			
Abstract publication inInternational Conference of Engineering and Telecommunication (EN & T 2018)	"Degrees of Freedom Analysis of Artificial Human Motion Model ",	Susmita Das	Moscow Institute of Physics and Technology(MIPT), Moscow, Russia.	15-16 th November 2018			
International Journal IJCA Proceedings on International Conference on Microelectronic Circuit and System	Effect of DNA-TiO2 Scaffold as Sensitize Absorber in Dye Sensitized Solar Cell	Saradindu Panda		Dec 20 18	973-93-80975-55-5		
International Conference ICCACCS 2018, To be published in Springer	Recurrence Quantification Analysis of Electrocardiogram Signals to Recognize the Effect of a Motivational Song on the Cardiac Electrophysiology	Anilesh Dey		23-24 Nov 2018			

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Electrophysiology'International conference on Computational Advancement in Communication Circuit and System International Conference ICCACCS 2018, To be published in Springer	Electrophysiology'	Anilesh Dey		23-24 Nov 2018			
International Conference ICCACCS 2018, To be published in Springer	Study the Effect of Cognitive Stress on HRV Signal Using 3D Phase Space Plot in Spherical Co-ordinate System' Electrophysiology	Anilesh Dey		23-24 Nov 2018			
International Conference ICCACCS 2018, To be published in Springer	Analysis of Heart Rate Variability to Understand the Immediate Effect of Smoking on the Autonomic Nervous System Activity	Anilesh Dey		23-24 Nov 2018			
International Conference ICCACCS 2018, To be published in Springer	Meteorological Parameter Studies during 6th December 2016 Indonesia	Pranab Hazra		23-24 Nov 2018 20 18			

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	Earthquake (Mw 6.5)						
International Conference ICCACCS 2018, To be published in Springer	WARP Test Bed Implementation of Lag order and Data Length optimized AR Spectrum Estimation Algorithm	Salil K. Sanyal		23-24 Nov 2018			
International Conference ICCACCS 2018, To be published in Springer	Comparative Analysis of 6T SRAM Cell In Terms Of Power Using SGMOS And DGMOS	Saradindu Panda		23-24 Nov 2018			
International Conference ICCACCS 2018, To be published in Springer	Comparative Analysis of 6T SRAM Cell In Terms Of Power Using SGMOS And DGMOS	Srabani Das (Roy)		23-24 Nov 2018			
International conference on Computational International Conference ICCACCS 2018, To be published in Springer	Power Grid Generation with Tectonic Mechanism Wind Energy Resources	Arnima Das		23-24 Nov 2018			
International conference on Computational International Conference ICCACCS 2018, To be published in Springer	Power Grid Generation with Tectonic Mechanism Wind Energy Resources'	Prof. Dr. Maitreyi Ray Kanjilal		23-24 Nov 2018			
International	Physical	Puspak Pain		23-24 Nov			

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conference on Computational International Conference ICCACCS 2018, To be published in Springer	Proof and Simulation of Ternary Logic Gate in Ternary Quantum Dot Cellular Automata			2018			
International Conference ICCACCS 2018, To be published in Springer	Physical Proof and Simulation of Ternary Logic Gate in Ternary Quantum Dot Cellular Automata	Maitreyi Ray Kanjilal		23-24 Nov 2018			
International Conference ICCACCS 2018, To be published in Springer	MVTRNG: Majority voter based crossed loop Quantum True Random number Generator in QCA Nanotechnology	Maitreyi Ray Kanjilal		23-24 Nov 2018			
International Conference ICCACCS 2018, To be published in Springer	Design and Comparative Analysis of Low Power High Speed 3-bit Flash ADC for Biomedical Signal Processing using 45 nm CMOS Technology	Soumen Pal		23-24 Nov 2018			
International Conference	Design and Comparative	Puspak Pain		23-24 Nov 2018			

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ICCACCS 2018, To be published in Springer	Analysis of Low Power High Speed 3-bit Flash ADC for Biomedical Signal Processing using 45 nm CMOS Technology						
International Journal Journal of Electronics and Communication Engineering and Technology,	Traffic Generation of Mobile Network using QualNet Simulator	Sangita Roy		November2018,	vol-9,Issue-5		
International Journal Journal of Emerging Technologies and Innovative Research,	'Investigation of Parsametric Evaluation of Gray Images	Sangita Roy		Nov 2018	vol-5,Issue-11		
International Journal Journal of computational methods in science and engineering	Tuning and transfer functional modelling of a prosthetic arm.	Swati Barui		Oct 2018	doi: 10.3233/JCM-180880		
International Conference IEEE Radio and Antenna Days of the Indian Ocean (IEEE RADIO 2018)	ANN Based Spectrum Sensing Technique for Cognitive Radio Applications	Sandhya Pattanayak		15-18 Oct 2018			
International Conference IEEE Radio and Antenna Days of the Indian Ocean (IEEE RADIO 2018)	A Linear Voltage Controlled Quadrature Oscillator	Sandhya Pattanayak		15-18 Oct 2018			
International	performance	Kamalika		23-24 nov			

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Conference ICCACCS 2018, To be published in Springer	analysis of a distribution system using d-statcom	Banerjee, Pallav Dutta. Dipu Mistry, Pratyusha Biswas Deb		2018			
International Conference ICCACCS 2018, To be published in Springer	Modelling And Design Of Maximum Power Point Tracking Algorithym Applicable To Dc-Dc Boost Converter	Souvik Deb, Abhishek Ghosh,Aarkendu Mitra		23-24 nov 2018			
International Conference ICCACCS 2018, To be published in Springer	Power Grid Generation With Tectonic Mechanism Wind Energy Resources	Susmita Das, Pratyusha Biswas Deb, Arnima Das, Arita Das, Ronojit Bose, Moitree Ray Kanjilal		23-24 nov 2018			
International Conference ICCACCS 2018, To be published in Springer	Artificial Intelligence Based Economic Control Of Microgrids: A Review Of Application Of Iot	Sandip Chanda, Pramila Das		23-24 nov 2018			
International Conference ICCACCS 2018, To be published in Springer	Study The Effect Of Cognitive Stress On Hrv Signal	Sudhangshu Sarkar, Pallav Dutta, Aniruddha		23-24 nov 2018			

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	Using Using 3d Phase Space Plot In Spherical Coordinate System	Chanda, Anilesh Dey					
International Conference ICCACCS 2018, To be published in Springer	Prototype Model For Controlling Of Soil Moisture And Ph In Smart Farming System	Suvamoy Bhattacharya, Sarthak Sarkar, Asehesh Sinha, Partha Sarkar, Sandip Chanda		23-24 nov 2018			
International Conference ICCACCS 2018, To be published in Springer	Avr Microcontroller Based Error Free Public Addressing System	Suvamoy Bhattacharya, Arijit Sen, Asehesh Sinha, Partha Sarkar, Sandip Chanda		23-24 nov 2018			
International Conference ICCACCS 2018, To be published in Springer	Influence Of Gate And Channel Engineering On Multigate Tunnel Fets: A Review	Ritam Dutta, Sukumar Chandra Konar, Nitai Paitya		23-24 Nov 2018			
ICRTSTSD 2018	Performance Analysis Of Grid Conned Photovoltaic System	Pratyusha Biwas Deb, Soumya Das		6-7 Aug 2018			
ICRTSTSD 2018	Solar Ac	Pratyusha Biswas Deb, Ipshita Dey, Sudeshna		6-7 Aug 2018			

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		Dutta					
IRJET	Cost Benfit Analysis Of Using Solar Pannel With Conventional Supply System In A Housing Appartment In Kolkata	Pallav Dutta, Ushnik Chakrabarti		06-07-2018			
Elsevier	Intelligent Speech Signal Processing	Sudhangshu Sarkar		18-07-2018			
International Conference ICCACCS 2018, To be published in Springer	"M-CSMA/CA :A Novel Protocol for White Space Identification in Cognitive Radio Networks"	Ms Subhasree Bhattacharj ee		23-24 Nov 2018			
International Conference ICCACCS 2018, To be published in Springer	"Emergency Restoration based on Priority of Load Importance using Floyd-Warshall Shortest Path Algorithm",	Dr. Sanjay Goswami et al		23-24 Nov 2018			
International Conference ICCACCS 2018, To be published in Springer	"Quantitative Structure Activity Relationship (QSAR) study of some DNA – intercalating anticancer	Dr. Sanjay Goswami et al		23-24 Nov 2018			

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	drugs",						
International Conference ICCACCS 2018, To be published in Springer	"To Explore Compounds as Tuberculosis Inhibitors – A Combination of Pharmacophore Modeling, Virtual Screening and Molecular Docking Studies",	Dr. Sanjay Goswami et al		23-24 Nov 2018			
3rd Regional Science & Technology Congress Southern Region, 2018.	Application of K-Means Clustering to identify village clusters to draw electricity from distributed solar generating plants,	Dr. Sanjay Goswami et al					
3rd Regional Science & Technology Congress Southern Region, 2018.	Application of Data Mining Techniques and Bioinformatics in Drug Discovery,	Dr. Sanjay Goswami et al,					
2nd International Conference on Biotechnology and Biological Sciences (Biospectrum 2018)	Mechanical Property Modification Of Nano $CaCO_3$ Induced PVC-	Rupa Bhattacharyya, Sumit Nandi	University of Engineering and Management, Kolkata	27-28 July, 2018			

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	Poly(Butyl Acrylate) Blends For Environme nt al Stability						
2nd International Conference on Biotechnology and Biological Sciences (Biospectrum 2018)	Enzyme efficacy for utilisation of refinery by products as alternative fuel	Dr. Sumit Nandi, Dr. Rupa Bhattachary ya and Dr. Gautam Misra,	University of Engineerin g and Management , Kolkata	27-28 July, 2018			

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6.4 R & D Grant

Name of the Principal Investigator/ Co Investigator (if applicable)	Name of the Funding agency	Type (Government/Non-Government)	Department of Principal Investigator/ Co Investigator	Year of Award	Funds provided (INR in lakhs)	Duration of the project
Prof. Dr. Maitrayei Ray Kanjilal	DST FIST (Own contribution)	Government	Institution	2018-2019	21,50,000	2018 to 2023
Prof. Dr. Maitrayei Ray Kanjilal	DST FIST	Government	Institution	2018-2019	26,10,830	2018 to 2023
Dr. Kunal Das	DST FIST	Government	Institution	2018-2019		2018 to 2023
Dr. Sandip Chanda	DST FIST	Government	Institution	2018-2019		2018 to 2023
Dr. Rupa Bhattacharyya	DST FIST	Government	Institution	2018-2019		2018 to 2023
Dr. Saradindu Panda	DST FIST	Government	Institution	2018-2019		2018 to 2023
Dr. Biman Mukherjee	DST FIST	Government	Institution	2018-2019		2018 to 2023

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Arkendu Mitra	DST FIST	Government	Institution	2018-2019		2018 to 2023
Dr. Biman Mukherjee	Govt. of West Bengal	Government	Civil Engineering	2018-2019	14,21,733	2018 to 2019
Prof. Dr. Maitrayei Ray Kanjilal	World Bank (TEQIP)	Government	Institution	2018-2019	2,192	2012 to 2017
Prof. Dr. Maitrayei Ray Kanjilal	World Bank (TEQIP)	Government	Institution	2018-2019	4,98,597	2012 to 2016
Dr. Sumit Chabri	Bosch Rexroth India Pvt. Ltd.	Non Government	Mechanical Engineering	2018-2019	92,16,346	2018 to 2023
Gautam Roy	Bosch Rexroth India Pvt. Ltd.	Non Government	Mechanical Engineering	2018-2019		2018 to 2023
Dr.Bikas Panja	Bosch Rexroth India Pvt. Ltd.	Non Government	Mechanical Engineering	2018-2019		2018 to 2023
Akhtarujjaman Sarkar	Bosch Rexroth India Pvt. Ltd.	Non Government	Mechanical Engineering	2018-2019		2018 to 2023
Dr.Amit Dutta	Bosch Rexroth India Pvt. Ltd.	Non Government	Mechanical Engineering	2018-2019		2018 to 2023
Dipu Mistry	Bosch Rexroth India Pvt. Ltd.	Non Government	Eletrical Engineering	2018-2019		2018 to 2023
Dr.Sandhya Pattanayak	Bosch Rexroth India Pvt. Ltd.	Non Government	Electronics and Communication Engineering	2018-2019		2018 to 2023
Swati Barui	Bosch Rexroth India Pvt. Ltd.	Non Government	Electronics and Communication Engineering	2018-2019		2018 to 2023

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Bansari Deb Majumder	Bosch Rexroth India Pvt. Ltd.	Non Government	Electronics and Instrumentation	2018-2019		2018 to 2023
Susmita Das	Bosch Rexroth India Pvt. Ltd.	Non Government	Electronics and Instrumentation	2018-2019		2018 to 2023

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Chapter 7

Glimpses of NSS Activities ::

Swachh Swatch Bharat abhiyaan

SWACCHTA PAKHWADA is an occasion to pledge the support of the higher educational institution for spreading the message of cleanliness not only among the students but also in the surrounding areas. That is why NSS unit of Narula Institute of Technology run the "Swachh Bharat Abhiyaan" throughout the year in our college premises and especially it was organized in our college premises and local area on 7th September, 2018.

Different initiatives taken towards Swachh Bharat Abhiyaan in our college premises

1. Zero tolerance to dust and filth.
2. Cleanliness of classrooms, Laboratories, Seminar Halls, Office premises, Hostels, etc.
3. lmproving Toilets facilities.
4, Garbage collection and disposal.
5. Ensuring Purity of Drinking Water.
6. Water harvesting plant.
7. Maintaining good Drainage System.
8. CCW and Fire safety equipment.
9. Environment friendly measures.
10. Demonstration classes on the Technology used for cleanliness.
11. stress on the mind set of students towards swachhata.
12. Visit of the students to nearby Village / Slum.
13. Paper on Swachhata.

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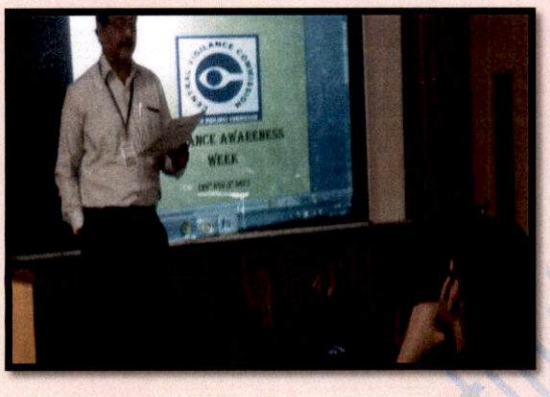
NATIONAL VIGILANCE AWARENESS WEEK CELEBRATION

The Central Vigilance Commission, as part of its efforts to promote probity in public life and to achieve a corruption free society, observes Vigilance Awareness Weekevery year. The week in which 31st October, the birthday of late Sardar Vallabhbhai Patel falls is observed as Vigilance Awareness Week.The birth anniversary of Sardar Vallabhbhai Patel was celebrated in a befitting manner at Narula Institute of Technology on 31st Oct 2018. The following activities were conducted on the eve of the occasion:

1. Administer the pledge of Integrity to all the students and faculty members in the morning assembly.



2. Prof. Dr. Biman Mukherjee, HOD, Civil Engineering gives a speech on the integrity and probity in public life and make people understand how corruption is eating at the roots of the Indian society and how to combat it.

Visit At Old Age Home

It is our great pleasure that NSS unit (SC 001) of Narula Institute of Technology Visited old age home orphan age home as a **Pre Diwali Celebration** on 2nd November,2018. They distributed sweets & crackers to the inmates. They all enjoyed a lot by sharing some good times together.A small celebration was organised by the Cultural Committee where our students made beautiful Rangoli and sang songs. Our Principal & Registrar also distributed sweets and crackers to the underprivileged children and their cheerful faces made the occasion more colourful to all of us.

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Celebration of National Education day

To celebrate the birth anniversary of Maulana Abul Kalam(national education day on 11th November) Azad Department of Civil Engineering organized a quiz competition on 27th November, 2018. Total 59 students from different departments participated in this quiz competition.
Competition started by briefing out the rules and the regulations to all the participants by the quiz master. Competition had total three rounds. Question from different fields were asked in the competition.

Health Awareness and health checkup camp

It is a great pleasure that NSS unit (SC 001) of Narula Institute of Technology has organized one day awareness program on health check up of all the faculties and staff members in our college premises. This awareness program consists of of Eye check up,

Random Blood sugar test, ECG, BP check. Around 120 persons including faculty and staff participated in this program. a team of eminent doctors named Dr Naba Kumar Biswas(General Medicine), Dr. Nivedita Chatterjee from Narayana Hospital, Barasat, Dr Sohail Khan(Dentist), Ms Sangita dhikari(Optometrics) and Ms Suparna Roy(Optometrics) were present. Dr Nivedita Chatterjee delivered her speech on general health awareness and hygiene. We all came to know about many important facts which will

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definitely help us to stay fit always. This session was attended by many faculties and staff members. A presentation was also given from Currae Eye care organization which is now gaining reputation in healthcare.

"Spread the Warmth of Love"

The NSS Committee of Narula Institute of Technology organised an event **"Spread the Warmth of Love"** on 22nd December,2018 at the college premises where they made a huge collection of warm clothes which was donated by our students, faculty and staff members.

A team comprising of students and the other faculty and staff members went to the nearby areas where they

distributed the clothes to the underprivileged and downtrodden. The members felt enormous joy and satisfaction by doing the noble work.

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Christmas Celebration

Narula Institute of Technology also participated to took an initiative to celebrate Christmas with all the students and the faculty members along with the slum children's.The celebration bought cheer to every student and staff and helped everyone became more confident linked towards the college community.

Prof. Maitraye Roy Kanjilal and Ms. Nidhi Singh took a very helpful initiative to celebrate Christmas with slum childrens and made their feelings as a gift in Christmas and shows a great humanity and kind nature towards them. This celebration main objective is to improving a path of humanity, friendship and sense of belonging. Students were encouraged to decorate the Christmas tree, cake and the surrounding premises. Teachers also created a festive atmosphere decorating their college with the students.Christmas is a time for jingle bells, gifts, carols, parties and holidays-having organized it made everybody partake in its wonderful spirit. It represented the college group effort and unity.

BLOOD DONATION CAMP

On 8th May 2019, NSS organised BLOOD DONATION CAMP at the Institute.A team of one doctor and six echnical staffs of NRS MCH blood bank came for collection of blood where 80 students donated their blood and out of which 12 were girls.

The State Blood Transfusion council awarded them with certificates of appreciation for their voluntary work.

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STUDENTS VISIT "SANGBEDAN" SOCIAL ORGANISATION.

On 8th May 2019, NSS organised a visit to a social organisation "Sangbedan" which is situated near Hatibagan on 8th May, 2019 with a group of ECE 1st year students.

It's an organisation which emphasises on the development and upbringing of mentally challenged children. The students spent some quality times with the children and also played several games and quiz with them.

They distributed pens, copies, chocolates and biscuits among the children. They also distributed various Teachings Learning materials (TLMs) prepared by their own in NSS classes to the children for easier & better learning.

ESSAY WRITING COMPETITION

On the auspicious occasion of WORLD YOGA DAY, NIT NSS Committee organised ESSAY WRITING COMPETITION on 8th July 2019. Essays were submitted till 7th July and an impartial judge adjudged the best piece of writing. The best three writings were awarded a prize. The first and second position was from Civil Engineering, Second year students. The third prize was taken by Electrical Engineering, second year student.

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JAL SHAKTI ABHIYAAN

The NSS Committee of Narula Institute of Technology has organised "Jal Shakti Abhiyaan" on 22nd July,2019 to celebrate the World water Day with a variety of events such as two street plays 'Ei ek ajob deser Kotha'& "Ei tukute ki Hobe", road rally, visiting nearby slum areas and showing a small PPT presentation to create awareness about the scarcity of water and different process to reserve water. Students participated widely in both events.

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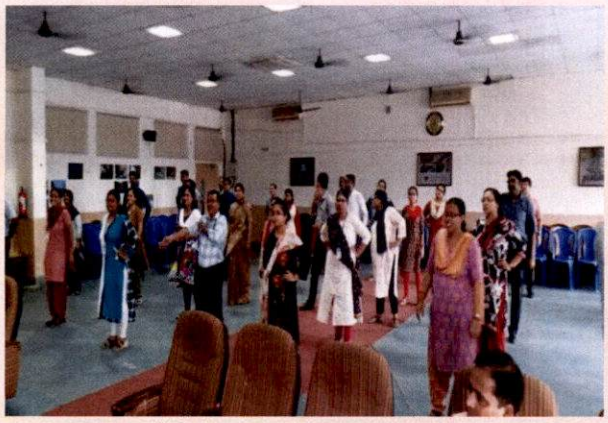
INTERNATIONAL YOGA DAY

On 21st June, NSS Committee organised "INTERNATIONAL DAY OF YOGA"at the Seminar Room of NIT building, from 11am.Faculties from all departments attended the event, and practiced Yoga.M**any students also participated.**



CLEAN AND SMART CAMPUS AWARD

As of 10th July, the NSS committee has successfully registered NIT fir AICTE convened **CLEAN AND SMART CAMPUS AWARDS 2019,** meant to felicitate clean and smart campus. Poster affixed.

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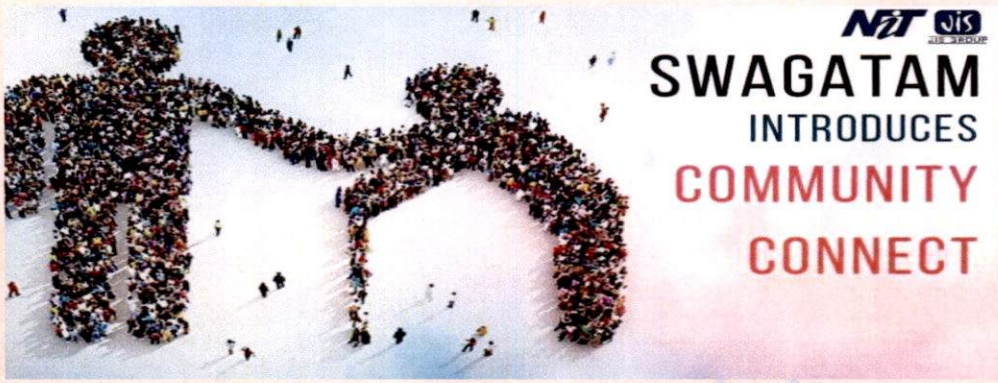
SWAGATAM INTRODUCES COMMUNITY CONNECT



Induction program for the 1st year students on 13th August 2019,ECE department NSS students, volunteers, faculty & staffs introduce to the 1st year students to COMMUNITY CONNECT as a part of their induction program on 13th August; the different NSS activities as a part of their induction program. What are the activities that is related to NSS that they can do in their 4 years , the student volunteers shared their different ideas and experiences which they implemented for the benefit of the society. The volunteers showed them different pictures where they visited earlier and told them how to do the activities with

the help of the respective teachers of the department. The volunteers & Faculty members motivates the 1st year students to join this social service program for the sake of the society.

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NPTEL

NPTEL Local Chapter has been opened on 13th July 2016 and since its opening at this college we are actively participating in taking the courses run by the NPTEL both by Faculties, Staff and students. Some of the Department taken some portion of assignment from the NPTEL courses wherever possible, in that case enrollment of courses by the students is mandatory. Department also provide mentor for some courses and they have to enroll for the course as a prerequisite to be a mentor. Following is the details data since its beginning at this Institute.

	Mentor Register	Mentor Certified	Total Enrollment	Total Certification	Toper	All India Rank
Jan-June 2019	30	-	2666	290	7	-
Jul-Dec-2018	110	10	2499	161	14	-
Jan-Jun:2018	110	15	2855	174	6	Between 51 and 100
Jul-Dec-2017	88	15	4717	199	5	87
Jan-Jun-2017	34	4	3894	148	4	53
Jul-Dec-2016	-	-	5	3	-	-

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Chapter 8 Placements

Overview :-

Training and Placement Cell is a core area in an Engineering College which compliments the efforts of the members of faculty by organizing value-added programmes and providing placement opportunities to students.

Training & Placement Cell :-

The cell continuously coordinates with the various industries and organizations for placement of the students. It liaises with the Corporate sectors and helps in developing the industry-academic inter-relationship.

The Cell organizes certain orientation programmes, grooming sessions, mock interviews for students of each stream. Besides, the Cell organizes various summer internship programmes for students to provide them with hands-on experience and introducing them to match the professional environment.

Keeping in view the requirements of industry, the Cell also takes initiative to arrange regular inter-active workshops, seminars and short-term courses with active participation of academia and industry.

It also takes initiative to develop the soft skills (Aptitude, HR, GD, PI etc) within students to make them feel comfortable in interviews and thus make them better employable. The Cell ensures that Career Development Programmes are also conducted on a regular basis for value added programmes. It also organizes industry-oriented special summer / winter courses in collaboration with reputed Corporate industries.

CAREER COUNCELLING PROGRAMMES

The Institute thrives for excellence in terms of the success of the students in various fields. The students require to be assisted in making meaningful occupational selection and preparation to have a fulfilling and rewarding career. The Institute arranges various training classes and programs throughout the year. The details of such programs in this year are as follows.

1. Training on Aptitude & Verbal & Non Verbal Reasoning Test

A training session has been conducted on aptitude, verbal & non-verbal reasoning tests of different campus recruitment drives of various companies. This session aims at the development of logical reasoning abilities of the students which enriches them with knowledge, promptness and confidence. The sessions have been conducted on monthly basis starting from 08.08.2018 to 05.12.2018. The Total number of students enrolled to the training session was 2523. The sessions have been conducted by Mr. Tapas Mukherjee, Professional Trainer and Prof. DebopriyaDey, Dept. of BS & HU, Narula Institute of Technology.

2. Mock Interview Sessions

The Institute arranges mock interview sessions every year for making the students capable and confident about the recruitment drives. This session was conducted once in a month in the time period of 11.08.2018 to 11.12.2018. The training was imparted by Ms. Rajasi Ray, Asst. Professor, Narula Institute of Technology and Ms.Deepika Ray, Corporate trainer. Total student strength was 1817.

3. Mock Test Sessions on Aptitude Training & Verbal & Non Verbal Reasoning

Like every year, this year also Mock Test Sessions on Aptitude Training & Verbal & Non Verbal Reasoning have been arranged by the Institute for strengthening the logical reasoning capacities and soft skill of the students. The basic aim of such sessions is to develop the technical ability and promptness by practicing test sessions. The tests have been taken by the students on monthly basis in the period between 28.08.2018-14.06.2019. Total number of students enrolled in this scheme was 1779. The training was conducted by by a professional body named Cocubes Training services Pvt. Ltd.

4. Mock Test Packages of various Companies for practice before placement drive

The Technical Training & Test Packages of different Companies have been arranged by the institute for the final year students. The Total number of students enrolled for these sessions were 1788. These sessions have been conducted by two external vendors named MyPerfectice and CoCubes. These preparative ventures have aimed at the enhancement of the technical knowledge and the required skill set of the students which further aimed at achieving success in recruitment interview.

5. Pre placement Talks

The pre placement talks are an important initiative organized by Narula Institute of Technology to give the students an understanding about the placement drives. . A number of renowned companies like TCS, IBM, Hexaware, CTS, Persistant, Genpact, Wipro, Simplex Infrastructure ITC Infotech,VastuViharLtd,IndianNavy,Asahi India Glass Ltd, Subex, Think & Learn Pvt. Ltd, Hitachi Consulting Software Services India Pvt. Ltd, Capgemini, Poornam, Xpanxion (UST Global) , ITC hotels QualicomSolution,Pinnacle,Infotech Solutions, VAP Technology Pvt. Ltd., AnG India Ltd., RashmiMetalics,Marble Box, Kovair Software Pvt.Ltd.,Accentus,GlobalLogic,Sasken Technologies, Subex, Netpro Systems, ACC, Verizon conducted Pre-placement talks in the year of 2018-2019. These sessions were organized centrally by the Training and Placement cell of the institute. The resource person of these events were the concerned employees of the respective organizations.

6. Panel Discussion related to Computer Networks and Security (NETWORKING)

Narula Institute of Technology has organized a panel discussion session on Computer Networks and Security on 21.05.2019. The focal point of this event was to identify some of the factors driving the need for network security and to define vulnerability, threat and attack. 263 students had attended this program and the name of the resource person was Prof Shubhendu Banerjee, CSE Dept., Narula Institute of Technology.

7. Panel Discussion on SKILL ASSESSMENT

The Institute has organized a panel discussion session on Skill Assessment on 28.07.2018 to upgrade the skills of the students in different career sectors after studying engineering. The resource person was Prof..SafikhureshiMondal, CSE Dept., Narula Institute of Technology. 564 students were present in this program.

8. Panel Discussion on ENTREPRENEURSHIP

The Institute has organized a panel discussion session on ENTREPRENEURSHIP to provide knowledge of business to the people having no knowledge and to make them successful businessmen. To Promote Small, Cottage & Local Industries was the main objective of this program. The date of the program was 22.10.2018. Dr. SriparrnaGuha, BA Dept., Narula Institute of Technology was the speaker of this program. 154 students had attended the program.

9. Discussion Session on CHOOSING A NEW CAREER PATH

The students sometimes may not choose the traditional career after completing their B.Tech. To encourage students for choosing a new career path, Narula Institute of Technology has organized a discussion session on the above mentioned topic. The resource person was Prof..MousumiSaha, CSE Dept., Narula Institute of Technology. 92 students were present in this program.

10. Symposium on research exposures through Matlab

Narula Institute of Technology has organized a symposium on research exposures through Matlab to enable the students to learn many of MATLAB commands. The symposium focused on how to use MATLAB in programming to solve many problems in different mathematical subjects, especially in numerical analysis and other subjects connected to computer oriented mathematics. The date of the program was 17.11.2018 and the speaker was Prof. SuchismitaMaity, Dept. of IT, Narula Institute of Technology. The count of the attendees was 71.

11. Hands On Session on Embedded System and Awareness of Industry Worldwide

To enable the students to understand embedded-system programming and apply that knowledge to design and develop embedded solutions, the Institute has organized a practical applications based session on Embedded System. The students learnt to interact with peripheral devices after attending this session. The date of the programme was 18.08.2018. 73 students had attended the session imparted by Prof..Sangita Roy, Dept. of ECE, Narula Institute of Technology.

Training for Competitive Examinations during 2018-2019

The training programs for competitive examination aims at motivating the students to participate in various competitive examination (GATE, GRE etc.) as well as preparing the students to face the challenges of the competitive examinations. Competitive exams also help out in choosing a career as students start identifying their areas of interest while getting a deeper knowledge of subjects. The students develop insightful understanding of these examinations and can prepare themselves into a potential career avenue. The details of such programs, arranged in this year, are as follows.

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.1.Training class for competitive exam GATE

To acquire the skill set of solving different problem for GATE (Graduate Aptitude Test for Engineers), Narula Institute of Technology has organized training classes for all the final and pre final year students of all departments throughout the whole semester (August to December). Different faculties from different department used to conduct this training classes.

2. Training class for competitive exam GRE

The GRE test is one of the most widely accepted graduate admission exams, particularly in the United States and English-speaking countries such as Canada and Australia. Narula Institute of Technology has organized training classes of GRE for all the final and pre final year students of all departments on 02.11.2018. Resource person was Ms. SarmisthaBasu, Dept of BS & HU, Narula Institute of Technology. 21 students have attended this class

3. Training class for competitive exam UPSC/IES

To give their best in any Govt. exam or in any administrative jobs, Narula Institute of Technology has organized training classes for the preparation of UPSC/IES, for all the final and pre final year students of all departments on 13.11.2018. Resource person was Ms. Shyamapriya Chowdhury, Dept. of IT, Narula Institute of Technology. Total number of attendance was 33.

4. Training class for competitive exam IELTS

The IELTS Academic test is suitable for those wanting to study in an English-speaking environment or university (higher education). Narula Institute of Technology has organized training classes for the preparation of IELTS for all the final and pre final year students of all departments on 19.03.2019 with 19 students, resource person was Ms. Rajasi Ray, dept of BS & HU, Narula Institute of Technology.

Training Snapshot:

- Beyond the Curriculum Training for 2nd& 3rd year students by the in-house faculty members & external trainingvendors.
- Aptitude & Soft Skill Training for the pre final & final year students by the external training vendors.
- Technical software training for the pre final & final year students by the in- housetrainer.
- Mock GDsessions
- Industrial trainings as opted by thestudents.
- MyPerfectice ongoing preparatorymodules

More Trainings, Workshops,

- Aptitude Training & Technical training already been completed for 2020 batch. Company specific revision training classes being conducted as and when required basis or before any campusevent.
- MockPersonalInterviewsessionsconductedbytheT&Pcell.
- PracticetestsforthestudentsbeingcoordinatedthroughMyPerfectice.
- Besides mastering the technical aspects of engineering the institute aims to ensure that students would also add new dimensions which will help them to cope up in this competitive world. For this the institute organizes Beyond Curriculum Training (BCT). The trainingprovides a platform for the students to interact with the professionals from various industries to fill up the gap between the Curriculum and the Industry needs. The institute arranges for industrial projects and internships for the students as a part of this training. BCT also helps to design and update the curriculum by taking suggestions from the industry experts on regular basis. The objective is to ensure that the students develop technical skills and core competencies to become effective technocrats to serve the industry and corporate world with utmost professionalism.

PLACEMENT RECORD FOR OUTGOING BATCH

Number of outgoing student	Number of placed student	percentage	How many students have cleared Civil Services and Defense examinations, NET, SLET, GATE and other competitive examinations	Number of student appeared in national/international level examination
736	641	87.09	15	46

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8.3 Faculty Orientation Programme

About the Programme

Narula Institute of technology organizes Annual Faculty Orientation Program for all the new recruits every year. All the Faculty members, Technical Assistants and staffs spanning all the departments attends the program to learn from experts about various aspects of teaching and learning. The Orientation Program's primary goal was to familiarize the participants with their roles and responsibilities. It was designed to orient them on various generic aspects of teaching learning, instructional methodologies, and assessment and evaluation techniques. The curriculum consisted of three modules Pedagogy, Research, and Ethics in Profession. Day 1 focused on science and engineering core where NiT expert faculties shows the participants how to prepare for lectures for various courses where topics ranged from physics, mathematics, electrical and electronics engineering etc. to project development. The second day started with lectures on curriculum constituents, academic structure of NiT, how to evaluate lectures and course monitoring, MOOCs, flipped classroom paradigms etc. On the third day included discussions on UG program, B. Tech. Project, faculty improvement, how to engage the UG and PG students in academic and extracurricular activities. On day four lab visits were organized to show them different laboratories at NiT. These tours included physics, chemistry, central workshop etc. Day 5 the group was divided according to their departments and visits were arranged to respective departments for closer interactions with faculty. These also included lecture on departmental core teaching strategies. As mentors we need to keep them motivated to evolve their teaching and research. We need to keep them involved in several activities through which they gain confidence and have a better understanding of their role as an educator. Some the following activities that can be beneficial for them:

- Teaching- learning methodology
- MOOCs on topics relevant to engineering education
- Training on how to generate new learning materials.
- Course on research methodologies
- Course on technical reading and writing

Objectives of the Programme

- To make the participants know the structure, functioning, governance, rules and regulations in Institutions of Higher Education and to orient them to become potential partners in institute building
- To enable the faculty to understand their roles and responsibilities in Higher Education and to impart essential professional skills, competencies and attitudes
- To enable the faculty to conceptualise the nuances of curriculum design and development in higher education at global standards.
- To train the participants in modern teaching methods and strategies
- To train the faculty on the use of ICT tools and integrating them in teaching and research
- To train the participants in methods of evaluation and assessment of diversified groups of students
- To provide research orientation to young faculty towards integrating research with pedagogy
- To develop practical knowledge in emotional balance of self and in student-counselling and mentoring
- To enable the faculty to generate new learning materials for enrichment of online open access platforms
- To provide knowledge about different models of leadership to the participants in order to enhance their academic leadership skills
- To enable the faculty to learn the principles of strategic planning and management.

Modules/Topics

1. General Principles

- Welcome Talk – General Feature of Institute
- Presentation on Academic Structure at NiT
- Generic curriculum and its Constituents
- What to test for? Learning evaluation through quizzes, exams, projects.
- MOOCS, Flipped Classroom paradigms
- Course monitoring mechanism at NiT
- Teaching management system (LMS)
- Mentoring System

2. Basic Fundamental Subjects
   - Core Physics – objectives, content, preparation, delivery, expectation
   - Core mathematics – objectives, content, preparation, delivery, expectation
   - Need for simple experimentation in classroom teaching
   - Overcoming functional English deficiency
   - Introduction to Electronics Engineering
   - Introduction of Electrical Engineering

3. Departmental core
   - Introduction to department – objectives, emphasis, course template, break-up of theory and lab. Component
   - Session on department core – major theory courses
   - Session on department core – major lab. courses, including concept of lab lecture visit to labs.

4. Autonomy examination process
   - Discussion on format of question paper.
   - Discussion on copy checking process.
   - Discussion on marks entry process.

5. R&D and Consultancy
   - Discussion on Faculty improvement - continued research
   - Critical Thinking + Ethics
   - Statistical Methods and errors
   - Scope of Consultancy

Resource Persons

Sl No.	Name	Department
1	Prof. S. K. Sanyal	Electronics and Communication Engineering, NiT
2	Prof. J. K. Roy	Electronics and Communication Engineering, NiT
3	Prof. Amlan Chakraborty	COE, NiT
4	Prof. Biman Mukherjee	Civil Engineering, NiT

List of Registered Participants

Sl No.	Faculty Name	Designation	Gender	Department
2	Rakesh Kanji	Assistant Professor	Male	Computer Science and Engineering
3	Priyanka Barat	Assistant Professor	Female	Electronics and Instrumentation Engineering
4	Amit Kumar Das	Assistant Professor	Male	Electronics and Communication Engineering
5	Kingsuk Halder	Assistant Professor	Male	Electrical Engineering
6	Raja Roy Chowdhury	Assistant Professor	Male	Electrical Engineering
7	Nabamita Banerjee Roy	Associate Professor	Female	Electrical Engineering
8	Biswajit Halder	Associate Professor	Male	Electrical Engineering

9	Bishaljit Paul	Associate Professor	Male	Electrical Engineering
10	Debasis Das	Associate Professor	Male	Civil Engineering
11	Chandrachudha Bhattacharyya	Assistant Professor	Male	Civil Engineering
12	Kathakali Mandal	Assistant Professor	Female	Basic Science and Humanities
13	Avery Banerjee	Assistant Professor	Female	Basic Science and Humanities
14	Debasmita Sen	Assistant Professor	Female	Basic Science and Humanities

Some Glimpses of the Event

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Professional Development Program

In academic year 2018 – 2019, Narula Institute of Technology has organised different types of programmes like Workshops,Faculty Development Programmes (FDP), Short Term Training Programme (STTP), Staff Development Programme, and National Conference. This year total 41 number of Workshops have been organised by Institute and collectively more than 2140 participants have taken active participation. 6 numbers of FDPs have been organised by Institute where internal faculties from different department as well as faculty members from other colleges also taken active participation. Overall 308 participants including many renowned delegates have made these FDPs successful.1 National Conference has been organised in this academic year where 70 participants have taken active participation. Moreover many renowned delegates made these programmes successful. 1 STTP has also been arranged with 50 numbers of participants in the month of February. 1 SDP has also been organised for staff members of the Institute in the month of July with 60 numbers of active participants.

Type of program	Title	Organized by	Duration	No of participants
Workshop	Workshop on Data Mining and Data Warehousing	Narula Intitute of Technology	08-06-2019 - 09-06-2019	40
	3 days workshop on Python fundamentals: series III	Narula Intitute of Technology	11-06-2019 - 13-06-2019	25
	Workshop On Innovative Project Development	Narula Intitute of Technology	01-05-2019 - 05-05-2019	40
	3 days workshop on Python fundamentals: series II	Narula Intitute of Technology	06-05-2019 - 08-05-2019	25
	Workshop on Java Programming: Principles of Software Design	Narula Intitute of Technology	04-05-2019-05-05-2019	43
	3 days workshop on Python fundamentals: series I	Narula Intitute of Technology	01-04-2019 - 03-04-2019	25
	Three days workshop on "PRECAST AND PREFABRICATED BUILDINGS"	Narula Intitute of Technology	23-04-2019 - 25-04-2019	47
	Workshop on Blockchain Technology & Its Application	Narula Intitute of Technology	08-04-2019 - 09-04-2019	45
	Three Days Workshop on "CNC Machining Technology & Practices"	Narula Intitute of Technology	24-04-2019 -26-04-2019	28
	Two Days Workshop on"Advancement in Concrete Treatment"	Narula Intitute of Technology	22-03-2019 - 23-03-2019	50
	Workshop on IT security	Narula Intitute of Technology	20-03-2019	25
	Two Days Workshop on "Philosophy of Machine Design"	Narula Intitute of Technology	06-03-2019 - 07-03-2019	51
	Workshop On Innovative Project Development	Narula Intitute of Technology	01-03-2019 - 05-03-2019	60
	Workshop on Machine Learning & Its application	Narula Intitute of Technology	07-02-2019 - 08-02-2019	46

One day Workshop on "Artificial Intelligence"	Narula Intitute of Technology	09-02-2019	30
Workshop on Social Network Analysis using Bigdata in Cloud	Narula Intitute of Technology	16-01-2019 - 17-01-2019	45
Two Days Workshop on "Conceptual Understanding of Heat Transfer"	Narula Intitute of Technology	11-01-2019 - 12-01-2019	42
Two weeks workshop on "Basic Circuit Design and Industrial Design Tools	Narula Intitute of Technology	07-01-2019 - 18-01-2019	27
3 days programme on Application of Matlab for Engineering , Science, and Research	Narula Intitute of Technology	20-12-2018 - 22-12-2018	42
Two Days workshop on "Domestic Wastewater Treatment Potential through Constructed Wetland System"	Narula Intitute of Technology	28-11-2018 - 29-11-2018	47
Two Days Workshop on "Recent Trends in Robotics & Automation"	Narula Intitute of Technology	15-11-2018 - 16-11-2018	50
Workshop on Big Data Analytics using HADOOP	Narula Intitute of Technology	04-11-2018 - 5-11-2018	45
Workshop on Android Application Development	Narula Intitute of Technology	01-11-2018 - 02-11-2018	36
Workshop on Data Science	Narula Intitute of Technology	09-10-2018	30
Workshop on Data Science & Machine Learning	Narula Intitute of Technology	04-10-2018 - 11-10-2018	36
2 days Workshop on "MEMS System Design"	Narula Intitute of Technology	01-10-2018 - 03-10-2-18	25
2 days Workshop on Power System Protection Technology	Narula Intitute of Technology	28-09-2018 - 29-09-2018	42
5 Days workshop on "Design and construction of anti-washout underwater concrete"	Narula Intitute of Technology	16-04-2018 - 20-04-2018	45
Three days workshop on "Advanced Technology in Sewage Treatment & Nutrient Removal"	Narula Intitute of Technology	05-09-2018 - 07-09-2018	45
One day Workshop on "Bigdata"	Narula Intitute of Technology	30-08-2018	30
Workshop on Building Web Application with PHP	Narula Intitute of Technology	22-08-2018 - 23-08-2018	37
Two Days Workshop on"Earthquake Resistance Structure"	Narula Intitute of Technology	20-08-2018 - 21-08-2018	47
Workshop on "RECENT TRENDS ON AUTOMATION"	Narula Intitute of Technology	18-08-2018 - 22-08-2018	50

	3 days workshop on Hazard Evaluation of Stored Capacitor Energy	Narula Intitute of Technology	16-08-2018 - 18-08-2018	42
	2 days Workshop on SCILAB	Narula Intitute of Technology	09-08-2018 - 11-08-2018	25
	Workshop on Deep Learning and Neural Network using Python	Narula Intitute of Technology	12-07-2018 - 13-07-2018	40
	Two Days Workshop on "Foundry Practices"	Narula Intitute of Technology	12-07-2018 - 13-07-2018	42
	Industrial Design Tools: AutoCAD, MATLAB, LabVIEW	Narula Intitute of Technology	03-07-2018 - 13-07-2018	114
	Workshop on Soft Computing Techniques & Robotics	Narula Intitute of Technology	09-07-2018 - 10-07-2018	36
	Workshop on Cloud Computing with AWS	Narula Intitute of Technology	24-07-2018 - 25-07-2018	37
	Workshop on Industrial Design Tools: AutoCAD, MATLAB, LabVIEW	Narula Intitute of Technology	03-07-2018 - 13-07-2018	34
FDP	Faculty Development Program on Artificial Intelligence	Narula Intitute of Technology	07-05-2019 -11-05-2019	48
	Faculty Development Program on Cloud Computing & Its Security	Narula Intitute of Technology	03-04-2019 - 07-04-2019	40
	One week FDP on Python	Narula Intitute of Technology	11-03-2019 - 15-03-2019	22
	FDP on "Energy Internet" using blockchain technology	Narula Intitute of Technology	28-01-2019 - 02-02-2019	35
	One week FDP on Recent trends in Automation	Narula Intitute of Technology	18-08-2018 -22-08-2018	51
	One Week FDP on "Modelling, Simulation & Optimization technique of Manufacturing"	Narula Intitute of Technology	10-09-2018 - 15-09-2018	41
Conference	2nd National Conference on Science, Technology and Communication Skills (NCSTCS 2K19)	Narula Intitute of Technology	05-04-2019	70
	The 2nd International Conference on Computational Advancement in Communication Circuit and System (ICCACCS 2018)	Narula Intitute of Technology	23-11-2018 - 24-11-2018	55
STTP	One week STTP on "Civil Engineering: Today and Tomorrow"	Narula Intitute of Technology	04-02-2019 - 08-02-2019	47
SDP	One week Staff Development Programme on Interpersonal and Computational Skills	Narula Intitute of Technology	20-07-2018 - 26-07-2018	60

CORE FEATURES

• A safe and peaceful environment • Relevant and responsive to the changing needs of our students and the society • Academic autonomy and flexibility • Sustainable and all-inclusive growth, including community outreach programmes • Lifelong commitment to learning • Encouragement of merit • Passion and motivation for work • Professionalism • Respect for law • Concern for the improvement of the society • Transparency in functioning of the Institute • Dedication to the Institute Values • Meritocracy • Unparalleled quality and excellence • Honesty, Integrity, Sincerity and Devotion • Trust and freedom with accountability • Appreciation and celebration of creativity • Willingness to try new ideas and make mistakes • Social and Moral responsibility • Respect for every individual, and diversity

WE THUS TARGET

• To build and develop an excellent institution for creating and imparting knowledge at the undergraduate, post graduate and doctoral levels, contributing to the development of the nation and the humanity at large. • To develop leaders with vision, creative thinking, social awareness and respect for our values. • To foster excellence in teaching and research to make a global impact. • To be the leader for academic and industrial collaborations in various disciplines, nationally and internationally. • To create awareness of the true significance of learning and teaching. • To enrich local schools and communities through value-added interactions. • To encourage excellent language skills as part of the institutional culture. • To prepare students not just for their first job but last job as well.

I thus thanking all the stakeholder of this Institute and presenting the annual report of 2018-19

Principal
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