

GURU NANAK INSTITUTE of TECHNOLOGY

Annual Report 2020-21



Accreditations, Affiliations & Approvals



ज्ञान-विज्ञान विमूक्तये
UGC



NAAC



AICTE



NBA



MAKAUT
(formerly WBUT)

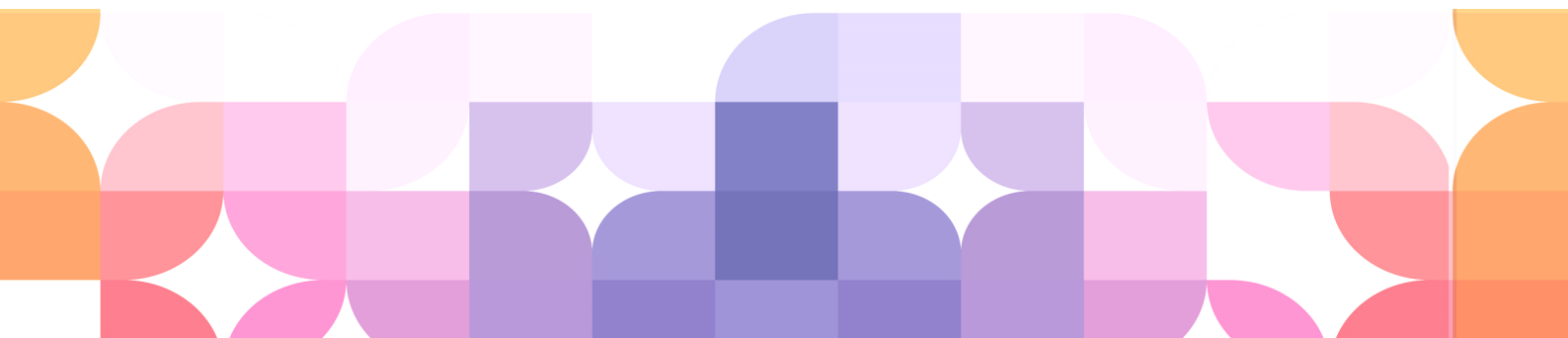


WBSCT & VE & SD
(formerly WBSCTE)

“ Vision looks inward and becomes duty. Vision looks outward and becomes aspiration. Vision looks upward and becomes faith.

”

- Sardar Jodh Singh



Founder



Sardar Jodh Singh



JIS GROUP
Educational Initiatives

Message from Managing Director



This gives me immense pleasure to induct the Annual Report of Guru Nanak Institute of Technology, Kolkata, West-Bengal. GNIT was established in the year 2003 by the Guru Nanak Educational Trust. GNIT is a unit of JIS Group Educational Initiatives. The institute is making progress in multidisciplinary dimension, consolidating the endeavour to consistently attain excellence. This annual report is the comprehensive report of the progress for the academic year 2017-18. The number of students' and faculties' achievements and recognitions multiplied during 2017-18. In the field of research, faculties and students published many noteworthy papers in different national and international forums. The institute has organized multifaceted events in national and international echelon.

GNIT have been going through a major transformation over the past years and it is not easy to assess the transformation impact from one year's results, but when looking back, it becomes clear just how much has changed. I want to thank our students, parents and others associated with GNIT, for their sustained trust. I want to thank our employees for their commitment, energy and irrepressible drive, which helped to establish GNIT as an institute of national repute.

Sardar Taranjit Singh
Managing Director, JIS

Message from Principal



Guru Nanak Institute of Technology (GNIT) was established in the year 2003 by the Guru Nanak Educational Trust. GNIT is a unit of JIS Group Educational Initiatives, a premier education service provider in West Bengal, having 30 Institutions, 25,000 students offering 72 academic programmes. Instituted with a vision to empower aspiring professionals with technological knowledge and professional expertise. This technical campus offering undergraduate and post graduate courses under MaulanaAbulKalam Azad University of Technology (MAKAUT formerly WBUT), approved by NAAC, UGC, NBA, AICTE is located in one of the prime locations in North Kolkata. The Institute offers global standard education in latest technology, fosters research initiatives and innovations undertaken by both the faculty members and the students to enrich and enhance the teaching learning process. This approach equips the students to keep pace with the dynamic evolution of science and technology both in academics and industry. The trend-setting academic endeavors of GNIT have produced some of the finest scholars and ace industry professionals amongst our alumni who have brought fame and laurels for both the institute and themselves.

The Institute is located at the industrial hub of Sodepur, well connected by road and railway and in near proximity to Kolkata International Airport and to Howrah, Sealdah and Kolkata railway stations, which are the gateways' to the city of joy. The serene and aesthetically developed campus is highly conducive for quality academic endeavors. The entire campus is smoking free & plastic free to ensure an eco-friendly and pollution free environment. The college has an enrollment of around 2000 students pursuing various degree engineering courses.

Sincerely

Prof (Dr) Santanu Kr. Sen
Principal, GNIT

Content

1. OVERVIEW

1.1. VISION AND MISSION OF THE INSTITUTE

1.2. AWARDS AND ASSOCIATION

1.3. ORGANOGRAM

1.4. ACADEMIC PROGRAMMES

1.5. ADMINISTRATIVE HEADS

2. GNIT AT A GLANCE

2.1. ADMISSION

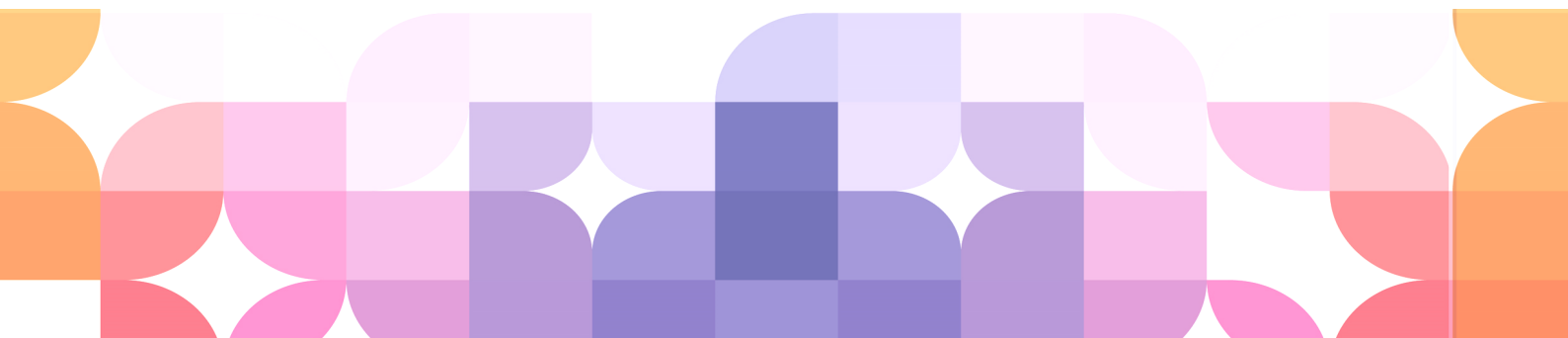
2.2. SCHOLARSHIP

2.3. TRAINING AND PLACEMENT

2.4. LIBRARY

2.5 MOU

2.6. IT RESOURCES



3. DEPARTMENT

3.1 DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

3.2 DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

3.3 DEPARTMENT OF ELECTRICAL ENGINEERING

3.4 DEPARTMENT OF FOOD TECHNOLOGY

3.5 DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING

3.6 DEPARTMENT OF APPLIED SCIENCE AND HUMANITIES

3.7 DEPARTMENT OF COMPUTER APPLICATION

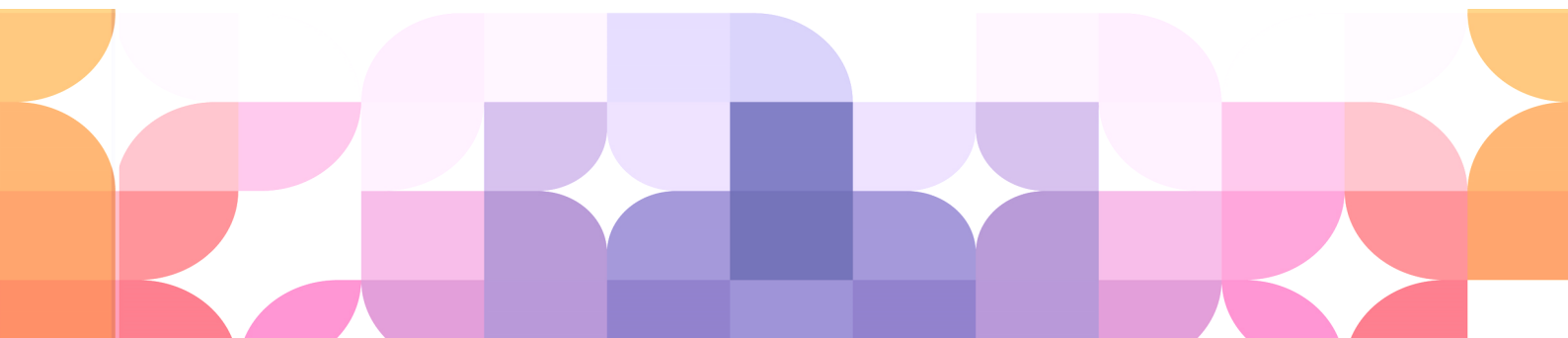
4. RESEARCH & PUBLICATION

4.1. PUBLICATION

4.2. SPONSORED RESEARCH & CONSULTANCY PROJECT

5. COMMITTEE

6. LIST OF PARTICIPANTS IN FDP, STTP, HANDS ON SESSION, WORKSHOP



Vision and Mission of the Institute

Vision of the Institute



Vision of the Institute

To ignite young minds with creativity and empowering lives and educate them to produce a galaxy of young professionals of outstanding ability who can become leaders in their profession and responsible citizens who can meet the challenges faced by the society



Mission of the Institute



Mission of the Institute

IM-1: To meet the demands for skilled manpower on a global basis in the field of engineering, technology and management

IM-2: To encourage and inspire students to take up higher studies and research










IM-3: To impart high quality education by providing the ambience needed for developing requisite skill for excellence in education and industry



Awards and Association



Associated With

 AIT Asian Institute of Technology AIT, Bangkok	 BCCI THE BENGAL CHAMBER	 IE (I)	 CII Confederation of Indian Industry	 ISTE
 ECAM GRADUATE SCHOOL OF ENGINEERING ECAM LYON, School of Engineering, France	 MSME Ministry of MSME, Govt. of India	 INFOSYS	 NASSCOM	

Achievements & Recognition

GNIT made WHO Recommended Hand Sanitizers and Double Layer Mask in March 2020 and distributed to Poor People free of cost



The 1st Covid-19 Hackathon on 30 March 2020

GNIT **JIS GROUP**

Guru Nanak Institute of Technology
presents
COVID-19 Hackathon
#HackforFightAgainstCovid-19
for both
HARDWARE & SOFTWARE
Last Date to Submit Idea:- 5th April 2020
For more details, visit www.covidhack.in

[/gnitsolkpurkolkata](https://www.facebook.com/gnitsolkpurkolkata) [/gnitsodepur](https://twitter.com/gnitsodepur) [/gurunanakinstitute](https://www.instagram.com/gurunanakinstitute) [/gurunanakinstituteoftechnology](https://www.youtube.com/gurunanakinstituteoftechnology)

Achievements & Recognition

The 1st Digital Cultural Night on 30 March 2020



The 1st Media Fest on 10 April 2020



Achievements & Recognition

LOCKDOWN Special Activity 2020 : Dept. News Letter



Version 1.0 (CA)
https://drive.google.com/file/d/1QI1QWw4NOkM_Z-yN6ntRLxsT6s2U1MqWJ/view?usp=sharing



From EE
<https://drive.google.com/file/d/1bDrraEY5FDYsYQ8kKcLOfwh2SY2jvll/view?usp=sharing>



Version II from IT
https://drive.google.com/file/d/1On0OwX30_12W4faG3MzRO8Bz4HQyk/view?usp=sharing



Version 1 (CSE)
<https://drive.google.com/file/d/1iK77gZH0JQDKN-HNqPxJzX406xITg19D/view?usp=sharing>



https://drive.google.com/file/d/1HH3V2NKWR_F7LKEtKlcc-RVAQab5vcmg/view?usp=sharing (ICT)



<https://drive.google.com/file/d/1rMkIUeOerDFFTsUzsevMcUq-QZ8LAuw/view?usp=sharing> (ECE)



Rishra People's Initiative Bar
 Hooghly, West Bengal, India
 50/1, Konnagar, Hooghly, West Bengal 712246, India
 Lat N 22° 42' 48.672"
 Long E 88° 20' 18.9024"
 01/02/21 03:47 PM

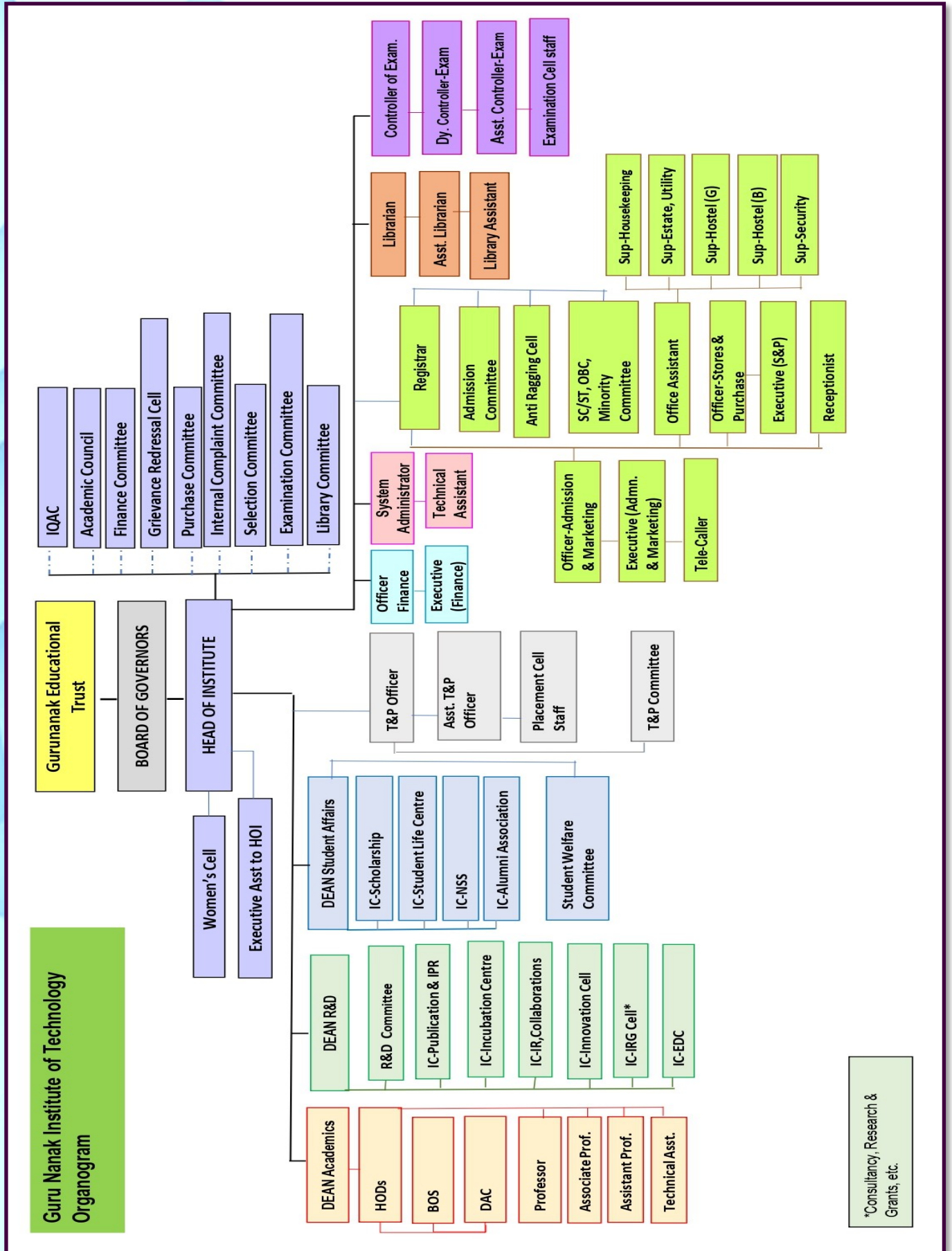


Weaving the fabric of hope in the lonely hearts of the needy our students march on.



Rishra People's Initiative Bar
 Hooghly, West Bengal, India
 50/1, Konnagar, Hooghly, West Bengal 712246, India
 Lat N 22° 42' 48.6396"
 Long E 88° 20' 18.7548"
 01/02/21 03:53 PM

Institutional Organogram



Administrative Heads



Dr. Santanu Kr. Sen
Principal
GNIT



Dr. Adish Chakroborty
Registrar
GNIT



Dr. Arun Kr. Mondal
Controller of examination
GNIT



Dr. Paramita Banerjee
Coordinator
IQAC, GNIT

Departmental Heads



Dr. Sucharita Chakraborti
HOD
Applied Science & Humanities



Dr. Sangeeta Bhattacharya
HOD
Computer Science &
Engineering



Dr. Sunipa Roy
HOD
Electronics & Communication
Engineering



Dr. Kakali Bandhopadhyay
HOD
Food Technology



Dr. Barnali Kundu
HOD
Electrical engineering



Mr. Sudeep Ghosh
HOD
Information Technology



Mr. Chiranjeeb Dutta
HOD
Computer Application



Mrs. Bapita Roy
HOD
Applied Electronics and
Instrumentation Engineering

Admission Report



GURU NANAK INSTITUTE OF TECHNOLOGY

Address: 157/F, Nilgunj Road, Panihati, Sodepur, Kolkata - 700114



Accreditation, Affiliation & Approvals



Awards & Ranks



First Engineering College in India with prestigious
QS I-GAUGE GOLD



Contact Details

Phone: 91-33-2523-3900
 Tel Fax: +91-33-2563-7957
 Visit at www.gnit.ac.in
 Email: admission.gnit@jisgroup.org

Career Counselling & Admission Helpline

Call us at +91 94320 12681 / +91 90736 83911
 Whatsapp: +91 94320 12681

Associated With



Undergraduate (Full Time): 4 Years

B.Tech

Computer Science and Engineering (CSE)	180 Seats
Electronics and Communication Engineering (ECE)	120 Seats
Electrical Engineering (EE)	60 Seats
Information Technology (IT)	90 Seats
Electronics and Instrumentation Engineering (EIE)	30 Seats
Food Technology (FT)	60 Seats

Postgraduate (Full Time)

Master in Computer Application (MCA), 3 Years	30 Seats
M.Tech in Mobile Communication and Network Technology Under(ECE) 2 Years	9 Seats
M.Tech in Computer Science and Engineering (CSE) 2 Years	9 Seats

Some of our Recruiters



Admission Report

Programme name	Programme Code	Number of seats sanctioned	Number of Students admitted
B.Tech in Computer Science & Engineering	CSE (01)	180	180
B.Tech in Electronics & Communication Engineering	ECE (02)	120	112
B.Tech in Electrical Engineering	EE (03)	60	41
B.Tech in Information Technology	IT (04)	90	74
B.Tech in Food Technology	FT (09)	60	44
B.Tech in Applied Electronics & Instrumentation Engineering	AEIE (05)	30	10
M.Tech in Computer Science & Engineering	M.Tech CSE (21)	9	6
M.Tech in Mobile Communication and Network Technology	M.Tech MCNT (22)	9	9
Master in Computer Application	MCA (41)	30	29

Scholarship

MTech-

Scholarship of @20% on tuition fee (Rs.2,00,000 for 2 years, total course fee is Rs.2,22,100 for 2018-19) i.e Rs.10,000/ per semester is applicable only to the students who have studied their B.Tech in any of the following institutions:

1. JISCE
2. NIT
3. GNIT
4. DSCSDEC
5. GKCEM (JV)

GATE qualified students are also eligible for this scholarship apart from their GATE scholarship from AICTE.

AICTE scholarship/stipend will be provided to the GATE qualified candidates as and when received from AICTE.

Financial assistance for publication in Scopus/Thompson & Reuters indexed journals i.e upto 50% of the publication fee
Classes will be conducted twice a week

B.TECH LATERAL-

Scholarship of Rs.60,000/- @ Rs.10,000/- per semester (Tuition fee is Rs.2,34,000 and total course fee is 2,97,050 for 2018-19) is applicable only to the students who have studied their three years Diploma in Engineering in this institutions:

1. JISSP
2. JISCE
3. NIT
4. GNIT
5. DSCSDEC
6. GKCEM (JV)

Scholarship

MCA-

Scholarship of Rs.45,000/- at the time of admission (Admission Fee: 10000/- + Caution money : 10000/- + Tution Fee : 25000/-) and Rs. 20000/- (Tution fee) in 2nd semester is applicable only to the students who have studied their Under-graduate courses in any of the following institutions:

1. JISCE
2. NIT
3. GNIT
4. GNIPST
5. JISU

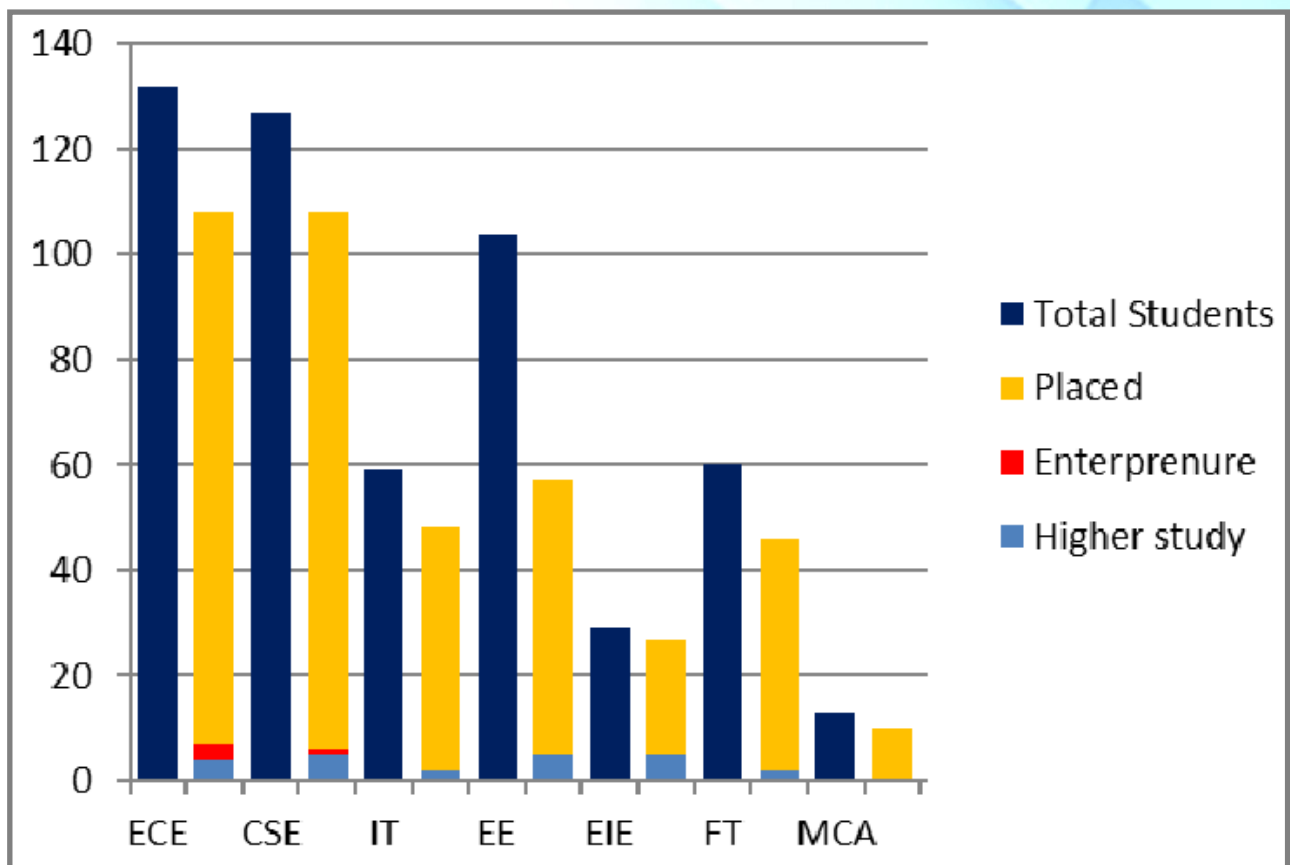
MBA (2 Years)					
Particulars	1st Sem	2nd Sem	3rd Sem	4th Sem	Total Fees
Application Kit (one time)	1000				
Admission Fees(one time)	5000				
Registration Fees (one time)	2600				
Caution Deposit (Refundable)	10000				
Library Fees Per Sem	1000	1000	1000	1000	
Student Activity Fees Per Sem	500	500	500	500	
Tution Fees Per Semester	99600	99600	99600	99600	
Grand Total	119700	101100	101100	101100	423000
Scholarship 30% on Tution Fees (Bet 70%-89%)	89820	71220	71220	71220	303480
Scholarship 25% on Tution Fees (Bet 40%-69%)	94800	76200	76200	76200	323400

Scholarships/ Teaching assistantships are liable to be withdrawn, partially or wholly, in case of misconduct, deliberate concealment of materials/facts and/or supply of false information, and/or continued absence of more than one month except on medical grounds.

Scholarships/Teaching assistantships are liable to be reduced or terminated for a period of up to one semester on account of poor academic performance or not carrying out the assigned tasks in a satisfactory manner.

Training & Placement

Around 117 companies took part in placement of the students in the academic year 2020-21. Some of the major companies which hired our students are. The highest salary offered is **Rs. 4.5 lacs Per annum by Accenture**. The average salary is. Rs. 2.20 lacs Per annum.



Training & Placement

The list of companies

Juspay | Johnson Controls | AsaBhanu | Capgemini | Deloitte | ITC Food Division | Capgemini | DBS | Zensar Technologies | Just Dial | Asahi India Glass | Adobe Systems India Pvt Ltd | Ganesh Products Pvt Ltd | ITC Infotech | TCG Digital | Efrac | DirectI | Prolifics Corporation Ltd. | Franciscan | Nestle | Pinnacle | Poornam | Infosys | IBS Software Services (P) Ltd | Genpact | Pinnacle | VastuVihar | Mindtree | Patel Information Technology Services | TCS | Innoraft | CTS | Kovair | JBM Group | Hearing Plus | Think & Learn (Byjus) | Asahi India Glass | Asahi India Glass | Indusnet Technologies | Techno Electric | Mphasis Ltd | Nerdy Turtlez | BSA Corp Ltd | Fixfin Technologies | Ginesys | Haricons Engineers & Contractors | Vijai Electricals | Stesalit Systems | Go Speedy Go | VastuVihar | Net2Source | Mitsuba Sical India Pvt Ltd | Manikaran | CSM Technologies | IoTivity | Collabera | CloudKaptan | Capgemini | Zicom Electronic Security Systems | Dynamics Finer Info Solution | erp2enterprise | oornam | Centium Electronics Ltd | Vyom Labs | HP Inc. (under the payroll of fidelis group) | Indigo | Linde Group | Tenneco India | Medullus Systems | Morse Systems India | Netpro System | Indigo | Adani Solar (Under the payroll of Addeco) | Gemini Systems | Control Print | Paapri Business Technologies | Tirumala Seven Hills | eClinical Works | Wipro Technologies | Wipro Technologies | Quadrant Suraksha Service | Blue Star | JR Technologies | Keyence India | Atlas Healthcare | CodeAchi Technologies | Hind Rectifier | Ambootia | Ayant Software Pvt.Ltd. | Valued Epistemics | LG Soft India | T-Web Exponent | Newhope Kolkata Animal Feed Private Limited | Ayant Software Pvt.Ltd. | Soft Vision | Aponiar Software | Motherson Automotive Technologies and Engineering | Xento Systems Pvt. Ltd. | Nerdy Turtlez | VAP Technology Pvt. Ltd. | Wizertech Informatics | Rajsriya Automotive Industries Pvt Ltd | Spicejet | New Vision Software | Sonodyne Electronics Pvt Ltd | Hexaware Technologies | VAP Technology Pvt. Ltd. | Netscribe | Irvine Infocom | Shree Balaji Equipments Pvt Ltd | Mantra Labs | Ridhima Enterprise | Passionate Futurist | Greppent Solution | Excel Orgo | Peol Technologies | Cyber Swift | Dhanush Engg. | Whitelion

Library Resources

Library Services

The Library is an information resource center providing books, magazines, periodicals, and newspapers. Computers offer Internet access to online databases of full text periodicals and electronic books. The Library offers study rooms, course reserve materials, and photocopy machines. Reference assistance is available for group and individualized instruction. Apart from faculty, staff, administration and students, Industrial establishments / corporate houses can also avail the services of Library on taking Institutional / Corporate membership of the Library. Library consultation facilities are also available to faculty and students of outside Institutes / Organization on request. The Library, besides having a huge collection of books on engineering, science and humanities offers library services through its various Divisions.

Area: Carpet area 660.43 sq.mt.

Hours of Operation

Other than the holidays and Sundays, library remains opens on

Monday to Friday: 08.00 a.m. to 8:00 p.m.

Saturday: 08.00 a.m.to 5.00 p.m.

Library Resources (Printed Document)

Text Books: 53852

Reference Books: 5666

Hard copy Journal & Magazine: 08 (Magazine)

News paper: 5 (4 Daily and 1 weekly)

Previous year question paper

Faculty Publication

Student Publication

Student Project Paper

E-Resources

E-books: 1, 15,000

E-Journal: 7825+

CD/DVD: 1547

Institutional Membership

We are collaborated with

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

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

Library Resources

British Council Library

Best current collection of British books and journals

Training materials

Professional training DVDs

Management Workshops and Video- Screenings

Business English skills development programmers

Exclusive series of workshops

Fully downloadable online resources (90,000+ e-books, 7,000+ e-journals) with personalized access

Management Information Support Services

Film screenings, musical performances, arts exhibitions and book launches

20 Books & 10 periodicals for three weeks

Two management training video for three weeks

Single login to 115000 full text E-books, 7000 full text e-journals, Literature Online(350,000 full-text works of English and American literature), Zinio (collection of international digital magazines) and IndieFlix (3000 award winning independent movies and short feature)

National Digital Library of India (Govt. of India)

Repository hosts contents for multiple subject domains like Technology, Science, Humanities, Agriculture and Others Repository integrates contents from different Indian Institutional repositories. NDLI is designed to hold content of any language and provide interface support for 10 most widely used Indian languages.

E-ShodhSindhu (Ministry of HRD)

Based on the recommendation of an Expert Committee, the Ministry of HRD (now renamed as Ministry of Education) has formed e-ShodhSindhu merging three consortia initiatives, namely UGC-INFONET Digital Library Consortium, NLIST and INDEST-AICTE Consortium. The e-ShodhSindhu will continue to provide current as well as archival access to more than 10,000 core and peer-reviewed journals and a number of bibliographic, citation and factual databases in different disciplines from a large number of publishers and aggregators to its member institutions.

MOU Details

Sl	Name of the Department	Name of Organization Signed MOU	Year	Programming Highlights/ Objective
1.	Department of Food Technology	Smart Management Consultancy	2017	Collaborate with industry for creating synergy of knowledge, innovations and professional expertise.
2.	Department of Food Technology	Vedaant AgroBiotech Limited (VABL)	2017	Enhancement of Professional Expertise and Knowledge and Training.
3	Department of Food Technology	Bundelkhand University	2018	Collaborations in Academic Developments, Industry Projects and student internships, R&D, Entrepreneurship Development
4	Department Of Information Technology	Ogma Tech Lab	2007	NASSCOM Apprentice Programme (NAP), Validity One Year.
5	Department Of Information Technology	Balishtha e Tech Pvt Ltd	2007	Over all Development of Technical Skill and knowledge
6	Dept. of CSE	Ardent Computech Private Limited	2021	Over all Development of Technical Skill and knowledge
7	Dept. of CSE	Globsyn Knowledge Foundation	2019	Under Campus Connect Programme for enriching the technical education process and to jointly work for enhancing the quality of education imparted to students, faculty and management of the college.
8	Dept. of CSE	Globsyn Knowledge Foundation	2019	To enhance knowledge, research activities and professional skills towards the modern technologies and recent trends in the field of automation, cutting edge technology for machining, design and tooling development and engineering support.

MOU Details

Sl	Name of the Department	Name of Organization Signed MOU	Year	Programming Highlights/ Objective
9	Dept. of CSE	Ardent Computech Private Limited	2021	Collaborate with industry for student internship, student training, R&D, knowledge exchange.
10	Dept. of CSE	Induji Technologies Private Limited	2017	Enhance knowledge, research activities and professional skills towards the modern technologies and recent trends in the field of automation.
11	Dept. of CSE	Induji Technologies Private Limited	2017	Collaborations in Academic Developments, Industry Projects and student internships, R&D, Entrepreneurship Development
12	Dept. of CSE	Infosys Campus Connect	2019	The objective of this MOU between Department of Electrical Engineering-Dept, Guru Nanak Institute of Technology and Electromech&Transtech Pvt. Ltd. would be to enhance technical skill of students as well as to provide the development of course curriculum as per current socioeconomic demand.
13	GURUNANAK INSTITUTE OF TECHNOLOGY	Ardent Computech Pvt Ltd	2020	Software Development, Training, and Technical Education (IT & Core Sector) FOR AIC
14	GURUNANAK INSTITUTE OF TECHNOLOGY	Prolific Systems & Technologies Pvt. Ltd	2017	Enhancement of technical skill of students as well as to provide the development of course curriculum as per current socioeconomic demand
15	GURUNANAK INSTITUTE OF TECHNOLOGY	MSME Tool room, Kolkata	2018	Research and Development
16	Dept of ECE	Reunited Tech Solution Pvt.Ltd	2020	Over all Development of Technical Skill and knowledge

MOU Details

Sl	Name of the Department	Name of Organization Signed MOU	Year	Programming Highlights/ Objective
17	Dept of ECE	OGMA tech lab,Kolkata	2018	Over all Development of Technical Skill and knowledge
18	Dept of ECE	Jadavpur University	2018	Over all Development of Technical Skill and knowledge
19	Dept of ECE	Ardent Computech Private Limited	2018	The goal of this MOU is to foster collaborative training, research and other activities to provide advancement in scientific knowledge for the benefit of society by enlarge.
20	Dept of ECE	Ardent Computech Private Limited	2020	Enhancement of technical skill of students as well as to provide the development of course curriculum as per current socioeconomic demand
21	Dept of ECE	Trident Techlabs Pvt.Ltd	2020	To provide student training, student internship, student placement, R&D activities and knowledge exchange.
22	Dept of ECE	Sikharthy Infotech Pvt.ltd	2021	Training on “Learn to design of own Solar Home System”

IT Resources

Hardware

SERVER - 6

DESKTOP - 961 (including 11 Workstation,215 not working)

LAPTOP- 17 (12 distributed to M.tech Student)

LCD Projector -14

Switches - 63

Firewall And Routers - 1 (Cyberoam 500ing Firewall),

1 (Cisco 2800 router),

1 (CISCO Rv 130 vpn Router)

Printers -44

Color laser Printer - 4

Scanners - 18

Photocopiers -1

Video Conferencing Systems-1

Wifi Dsevice = 21

Bio Metric Devie = 3

CCTV Cameras - 147



IT Resources

Services

WiFi Bandwidth -

20-30 Mbps Average from campus Infrastructure from 50 Mbps Railtel, 25 Mbps Alliance Broadband Lease Line Connection.

1 Gbps CAT6 Intranet - connected

Central Computing Facilities: yes

MHRD's QEEE Infrastructure :

Microsoft Exchange mail server: managed by Hash Technologies

WiFi Facility through the campus: yes

Website hosting all university Details: managed by Hash Technologies

Software

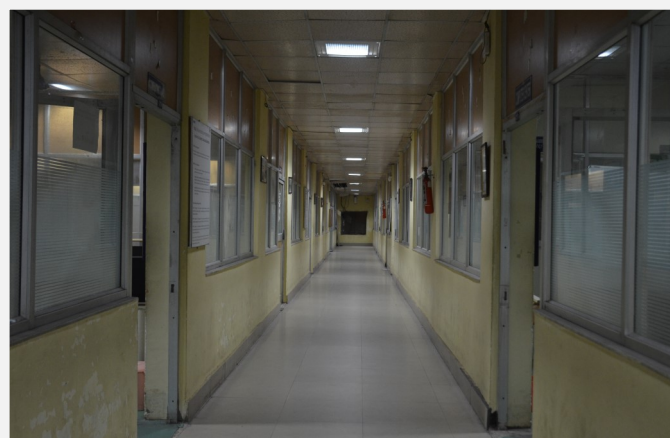
Licensed Software :-

* Microsoft windows(7/8/10) , Server(2008/2012/2016/2019) And Office 365 (Campus AGREEMENT)

	Department	Software
Application Software	EC	Matlab 2013- 5 user(perpetual) Tanner v 15.2- 5 user(for Ledit) & 5 user(for Sedit) Electronic Device and Service - (1 dvd) –perpetual Mentor Software – 1 nos. VLSI Universal Trainer Kit – 1 nos. VLSI Back End- mentor IC Nanometer Design Bundle (30 users)
	MCA	Microsoft Volume License(as campus agreement).
	IT	Microsoft Volume License(as campus agreement).

IT Resources

	Department	Software
Application Software	FT	Microsoft Volume License(as campus agreement).
	Library	Multiuser LSease (EJB) Software(LIBSYS 4). expired
	ASHU	Orell Pro – 60 Users. Autocad 2005-win edu – single user License. Engineer Graohics/Drawing(1 dvd) –perpetual Basic of Mechanical & Civil - (1 dvd) –perpetual
	CSE	Oracle 10.2 Linux version-20 users (perpetual) Photoshop CS6 – 300 points (single license) Fundamental of Computing & programming(1 dvd)- perpetual Microsoft Server 2003 Standard edition (3 CD) – single user Xiline vivado software @25 user pack (Perpetual)
	EE	Matlab 2013 – 10 users(perpetual) My Power – 5 User(perpetual) Multisim 13 – 10 users(perpetual) Basic of electrical & electronics(1 dvd) – perpetual ETAP Software 19.5 version(5 users Educational Licence) – perpetual NI Academic Lab VIEW 5 USER.SOFTWARE Latest & Perpetual Includes NI Lab VIEW Professional Development System and popular LabVIEW, modules such as Lab VIEW Control Design and Simulation, Lab VIEW FPGA,and, NI Vision and etc.



GURU NANAK INSTITUTE OF TECHNOLOGY

Department
of
Computer Science & Engineering

ANNUAL REPORT

2020-21

Name of the Department: Computer Science and Engineering

Vision of the department

To produce proficient professionals of global standard with respect to industry, academia, and entrepreneurship who can play a key role in their respective domain and become a responsible citizen for the sustainable growth of the society.

Mission of the department

DM1: To impart quality education with holistic development to produce professionals with leadership traits

DM2: To impart knowledge on emerging technologies and entrepreneurship skills to produce technocrats of global standard and entrepreneurs

DM3: To promote interdisciplinary work culture and opportunity to work in a team through collaborative research and project work

DM4: To inculcate professional ethics and moral responsibility for a better society

PEO

PEO1: Our graduates will establish themselves as effective professionals in industry, academia and entrepreneurship.

PEO2: Our graduates will become profound researchers in multiple domains.

PEO3: Our graduates will act as a leader in society.

Program Outcomes

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

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

Programme Specific Outcomes (PSOs)

PSO 1: To use efficient algorithm for designing and developing software applications and products

PSO 2: To correlate computer science and core engineering subjects to solve real life problems across multiple domains

PSO 3: To write code efficiently in competitive environment in national and international platform

Brief overview of the department

The Department of Computer Science and Engineering was established in the year 2003 and provides a comprehensive research environment complemented by excellence in teaching. The Department has a number of qualified teachers who encourage the students to get engaged in several extra-curricular and co-curricular activities for them to be successful engineers. The Department of Computer Science and Engineering aims to bring up students as engineers; helping them to build, strong technical acumen, and harness their skills and talents through several cutting-edge technologies and state-of-the-art techniques. The Department also keeps focus on research and development activities and foster innovative. The department focus on holistic development of the students through extra-curricular and co-curricular activities. In addition to escalating technical manpower, the Department also publishes periodically several newsletter and magazines to inculcate creative ventures.

Courses Offered:

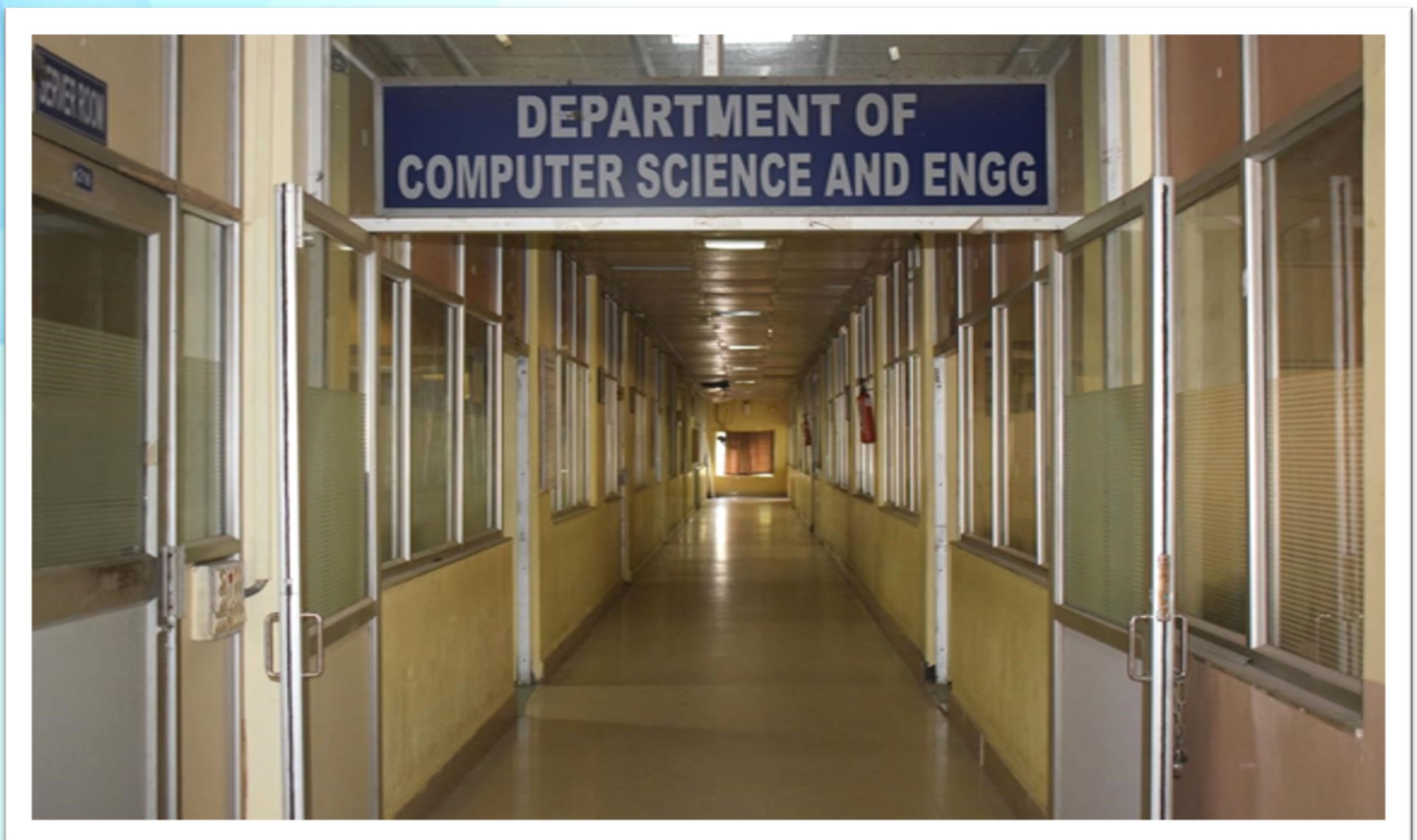
4 years B.Tech and 2 years M.Tech in Computer Science and Engineering.

CORE STRENGTH:

Department of Computer Science & Engineering

Computers being used in almost every aspect of life: Automobile Engines, Electronic Devices, Microwave Ovens, Telephones, Medical Diagnostic Equipment, Commercial Aircraft, and Orbital Satellites that deliver cable signals around the world, this area of specialization is one of the fastest growing segments of industry and changing areas of technology. Engineering graduates with degrees in Computer Science and Engineering might find themselves in a variety of environments –Academia and Research (pursuing M.Tech or Phd.), Software Industry (Companies like IBM, TCS, CTS, Capgemini, Tech Mahindra, ITC Infotech), Government Organizations (like DRDO, ISRO, BHEL, BAARC), and PSU (like SAIL, ONGC, Indian Oil, SBI).

The department is a life institutional member of ISCTE and Institute of Engineers (India) .



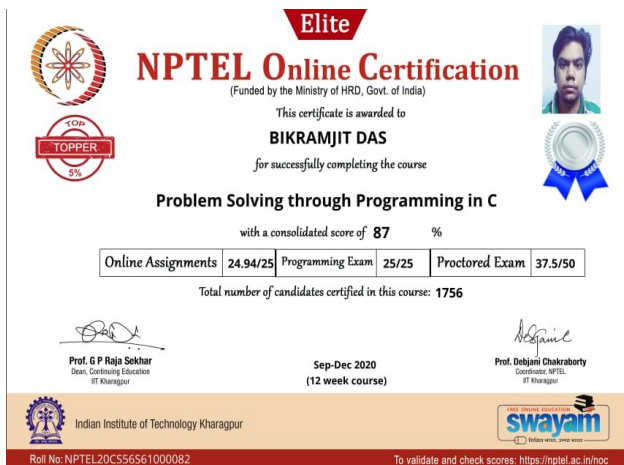
HOD's message

Department of Computer Science & Engineering is successfully continuing with the digital teaching which was started during the lockdown period due to COVID-19 outbreak. Physical interaction with the students has resulted in outstanding virtual experience. Started in 2003, the department offers B.Tech. (CSE) and M.Tech. (CSE), guided and taught by highly qualified and motivated faculties and technical staff, thereby engaging the students in an innovative teaching-learning process to provide a comprehensive academic environment. Apart from curriculum, the department regularly conducts value-added courses, soft skill programs, and webinars by qualified resource persons and alumni from industry and academia to motivate the students to understand the dynamics of the industry and to upgrade their skills for higher studies. The department boasts of outstanding achievements from both students and faculties in not only academics but also co-curricular and extracurricular activities.

Dr. Sangeeta Bhattacharya
HOD, CSE Department

Departmental achievements

Student's achievements



Elite
NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to
BIKRAMJIT DAS
for successfully completing the course

Problem Solving through Programming in C
with a consolidated score of **87** %

Online Assignments	24.94/25	Programming Exam	25/25	Proctored Exam	37.5/50
--------------------	----------	------------------	-------	----------------	---------

Total number of candidates certified in this course: **1756**

Prof. G P Raja Sekhar
Dean, Continuing Education
IIT Kharagpur

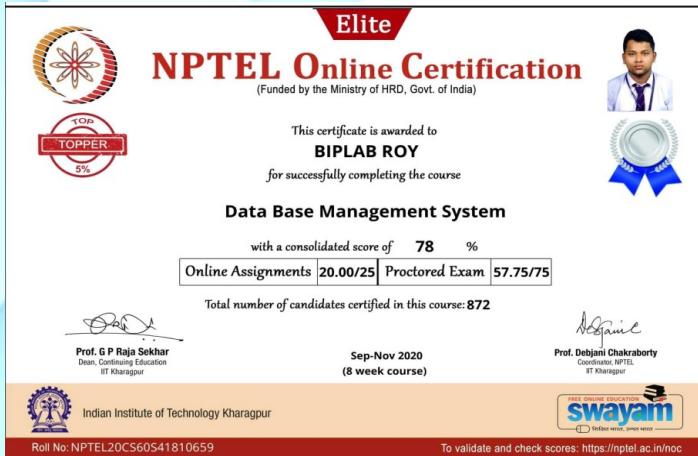
Sep-Dec 2020
(12 week course)

Prof. Debjani Chakraborty
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

Roll No: NPTEL20CS56561000082 To validate and check scores: <https://npTEL.ac.in/noc>

Bikramjit Das became Topper and Obtained Elite+Silver Certificate NPTEL "Problem Solving through Programming in C" during Odd Semester, 2020-21



Biplab Roy became Topper and Obtained Elite+Silver Certificate NPTEL "Data Base Management System" during Odd Semester, 2020-21 and Elite+Silver Certificate NPTEL "Programming in JAVA"



Kuntal Kumar Samanta became Topper and Obtained Elite+Gold Certificate NPTEL "Introduction to Programming in C" during Odd Semester, 2020-21



Pratiti Chanda, Shreya Saha, Prithviraj Biswas, Purushottam Thakur, Sohan Kumar Dutta (3rd Year 2022 Passout Batch) are Champions of Smart India Hackathon 2020, software Edition

- * Debashis Biswas Selected to work in the Government Project (TARE Scheme), under a faculty of EE dept.
- * Bikram Kumar received First prize in Innovation @New Normal From Guru Nanak institute of technology.
- * Raktim Chatterjee got Merit Certificate with distinction on August, 2020 and Topped the leader board out of 100 Interns from various colleges across India and got selected for Merit Certificate with distinction.
- * Raktim Chatterjee Got selected as front-end developer intern for a US based startup, on 20th September, 2020.
- * Mohit Kr. Sinha Earned Gold Badge (5 Star) in C++ Competitive Programming in HackerRank
- * Deepak Pandey, Mamta Singh, Kashis Rani, Prafulla Kumar Sahni, Atrayee Gayne Under the mentorship of Dr. Sangeeta Bhattacharyya the Team Unbeatables led by got 1st runner up rank in in Resurrect 2020 .
- * Ms. Subarna Guin ,Subarna guin(team leader) Subhajit Pati, Sourav Mallick,Snehashis chakraborty, Soumik Sarkar Under the mentorship of Mr. Moloy Dhar the team Creep Access hold 2nd Runner Up position in Resurrect 2020 with the idea 'Design Thinking Challenge intensively engaged in Innovations to Handle Post Covid19 Challenges in all the Spheres of Life'
- * Debasish Baidya selected as front-end developer intern for a US based start-up, and he had participated at Quiz on Research Methodology on July, 2020 at Hyderabad.
- * Diganta Das selected as Campus Ambassador for International Model United Nations (IMUN) during the Period: June, 2020 - Aug, 2020 approached through Social Media Platforms: #Facebook #Instagram #LinkedIn #Twitter #WhatsApp.

Faculty's achievements

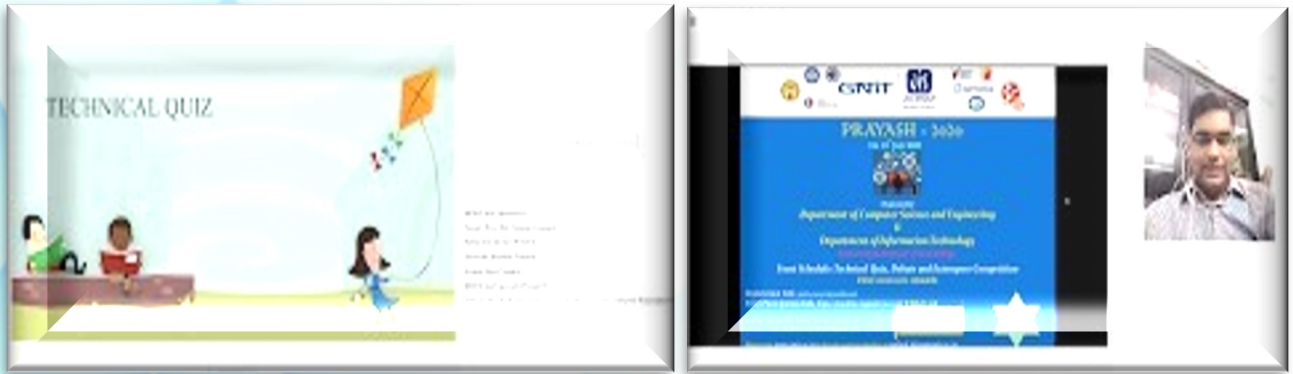
- * Nirupam Saha Became Topper and Obtained Elite+Siver Certificate NPTEL "Problem Solving through Programming in C" during Odd Semester, 2020-21
- * Nirupam Saha Obtained Elite Certificate and "Introduction to Programming in C" during Odd Semester, 2020-2021
- * Bidyutmala Saha Obtained Elite+Siver Certificate NPTEL "Problem Solving through Programming in C" during Odd Semester, 2020-21 and Elite Certificate and "Introduction to Programming in C" during Odd Semester, 2020-2021
- * Sourish Mitra Obtained Elite+Siver Certificate NPTEL "Problem Solving through Programming in C" during Odd Semester, 2020-21 and Elite Certificate and "Introduction to Programming in C" during Odd Semester, 2020-2021
- * Dr. Rupak Chakraborty Speaker in Five days Online FDP on "Latex with Hands on Experience and Innovative Teaching in Digital Environment" from 18th - 22nd August 2020
- * Dr. Rupak Chakraborty and Dr. Suman Bhattacharya were SESSION CHAIR of FEMAS 2021 organized by ECE department of GNIT.
- * Dr. Mahamuda Sultana was a Reviewer and TPC member of " CICBA-2021" Springer Conference
- * Dr. Rupak Chakraborty and Dr. Mahamuda Sultana were TPC member of ICRITO-2021, IEEE Conference
- * Dr. Rupak Chakraborty Served as Reviewer in Renowned SCIE journals like Computers and Electrical Engineering (Elsevier), Journal of Ambient Intelligence and Humanized Computing (Springer)
- * Dr. Rupak Chakraborty Got Top 100 International Distinguished Researcher 2020 Powered by Green ThinkerZ.
- * Dr. Mahamuda Sultana and Dr. Suman Bhattacharya Received Young Achievers Award from Institute of Scholar(InSc)

- * Moloy Dhar was Reviewer of Advances in Science, Technology and Engineering Systems Journal (ASTESJ)
- * Dr. Rupak Chakraborty Published a Manuscript named " IFODPSO-based multi-level image segmentation scheme aided with Masi entropy" on Journal of Ambient Intelligence and Humanized Computing, Springer, SCIE, (IF-4.594)
- * Dr. Sangeeta Bhattacharya Submitted Project titled "Our Indian shop" to MHRD IIC as a mentor
- * Dr. Amrut Ranjan Jena Awarded JIS SAMMAN 2021 for FACULTY WITH HIGHEST NUMBER OF PUBLICATION from CSE
- * Srabani Kundu Awarded JIS SAMMAN 2021 for BEST VIDEO LECTURE from CSE
- * Moloy Dhar Awarded JIS SAMMAN 2021 for FACULTY WITH HIGHEST NUMBER OF STUDENTS PUBLICATION from CSE
- * Dr. Sangeeta Bhattacharya Awarded JIS SAMMAN 2021 for Badminton Women's Doubles Semifinalist

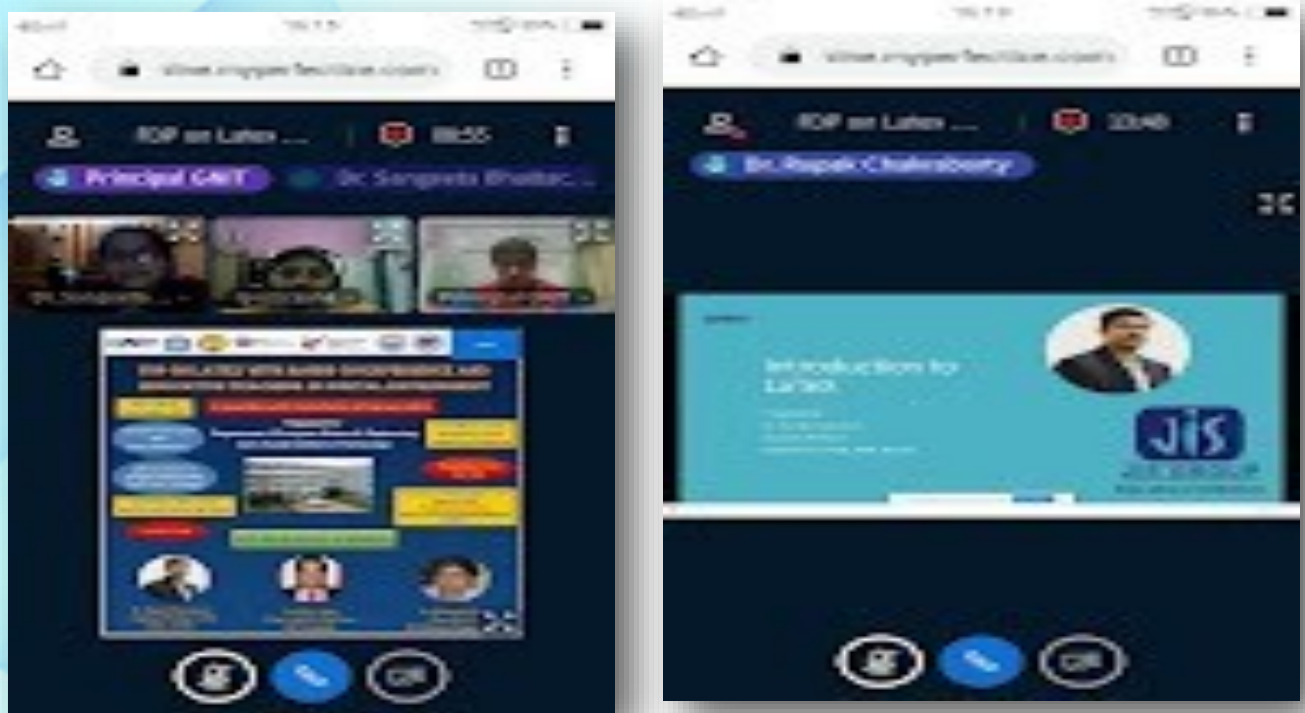
Departmental Events

Organized

- * Department of Computer Science & Engineering and Information Technology in collaboration with Admission Cell had organized an Admission Drive 'PRAYASH-2020' on 13th July, 2020, an initiative comprising Technical Quiz, Debate and Extempore Competition



- * Five days Online Faculty Development Programon “Latex with Hands on Experience and Innovative Teaching in Digital environment” was organized by the Department of Computer Science & Engineering of Guru Nanak Institute of Technology, in association with The Institution of Engineers (India), from 18th August, 2020 to 22ndAugust, 2020.



- * Department of Computer Science & Engineering of Guru Nanak Institute of Technology in collaboration with Webskitters Technology Solutions Pvt Ltd. under IE Chapter has organized a one day webinar on ‘Machine Learning and Cyber Security’ on 21st November, 2020 for the 2nd year students.

- * A Webinar on 'Aptitude for Campus Recruitment and Problem Solving Approach in Programming' was successfully organized by Department of Computer Science & Engineering of Guru Nanak Institute of Technology in association with Ardent Computech. Pvt. Ltd. under IE Chapter on 24th August, 2020.



- * Department of Computer Science and Engineering in collaboration with Institution Innovation Council has organized a Webinar on the topic entitled 'Prototype Validation: Converting Prototype into a Start-Up' on 19, June'21.
- * Department of CSE organized a webinar on 'A Missing Link to your dream internship' on 26th June, 2021.

Alumni Interaction on

The Missing Link to your Dream Internship

For
4th Year CSE students

26 June'21 Saturday
12:00 to 01:00 PM

Facilitator:

Vikram Kumar
Chief Technology Officer, Sama

Vishal Srivastava
Consultant Trainer at Sama,
Emerging Technology and Intelligent
Automation Consultant at EY, Ex –
IBM

Organized by:
Computer Science & Engineering

Scan here to Register:



Register by
25, June'21 ,by 10:00 PM

GNTI | **JIS**
JIS GROUP
Educational Initiatives

Participation by Faculty & Staff

- * All Faculty members and all JTAs of CSE Dept. attended Five day Online Faculty Development Program on Latex with Hands on Experience and Innovative Teaching in Digital Environment from 18, August'20 to 22, August'20 organized by Computer Science & Engineering, GNIT in association with The Institution of Engineers (India)
- * Dr. Amrut Ranjan Jena attended FDP on GIS from 07, July'20 to 10, July'20 organized by SIT, Sambalpur
- * Dr. Amrut Ranjan Jena attended AICTE ATAL FDP on ARVR from 02, November'20 to 06, November'20
- * Dr. Suman Bhattacharya attended training on ARTIFICIAL INTELLIGENCE WITH MACHINE LEARNING from 03, November'20 to 05, November'20 organized by SPRINGFEST IIT Kharagpur
- * Dr. Suman Bhattacharya and Dr. Mahamuda Sultana attended Webinar on "Blockchain" on 05, December'20
- * Mr. Moloy Dhar attended Attended ATAL FDP on Blockchain from 14, December'20 to 18, December'20 organized by Gurukul Kangri University, Haridwar
- * Mr. Moloy Dhar attended AICTE sponsored STTP on Recent Advances and Trends in Machine Learning: Theory and Application (Phase-3) from 08, February'21 to 13, February'21 organized by Department of Electrical Engineering, Asansol Engineering College, West Bengal
- * Ms. Srabani Kundu attended one-week AICTE sponsored FDP on "Internet of Things (IoT)" from 11, August'20 to 13, August'20 organized by Sridevi Womens Engineering college
- * Ms. Pallabi Das attended Online FACULTY DEVELOPMENT PROGRAM on Electronic Devices, Image Processing and Machine Learning from 11, August'20 to 15, August'20 organized by Department Of Electronics And Communication Engineering Guru Nanak Institute Of Technology
- * Ms. Pallabi Das attended FDP on "Technological Advancement in Electric Vehicles" from 17, August'20 to 21, August'20 organized by EE dept ,GNIT
- * Dr. Sangeeta Bhattacharya and Ms. Sayani Chandra attended AICTE Sponsored 6-Day online STTP Phase I entitled "Machine Learning, Pattern Recognition And Their Applications" from 02, November'20 to 07, November' 20 organized by De-

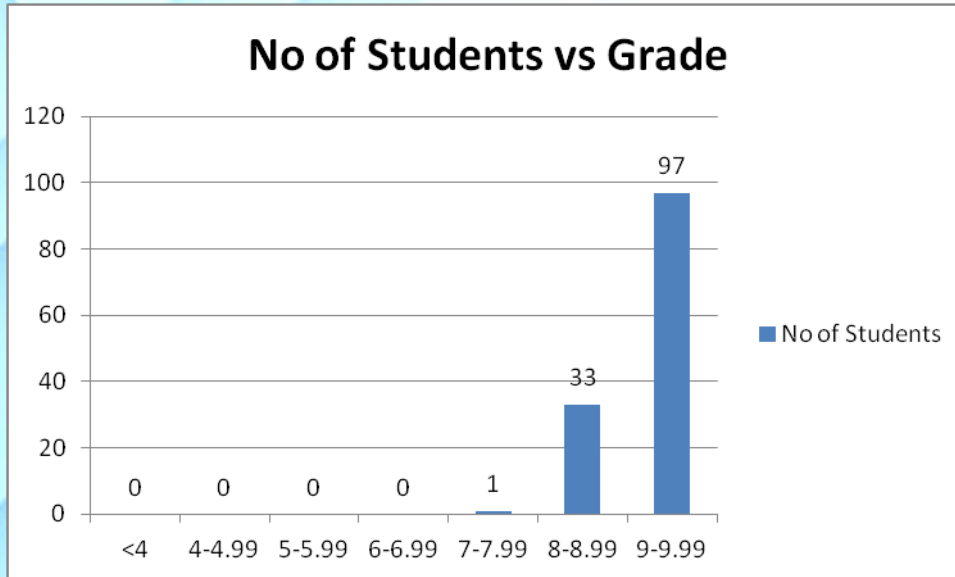
partment of Information Technology of St. Thomas' College of Engineering & Technology

- * Dr. Sangeeta Bhattacharya attended AICTE sponsored online Short Term Training Programme (STTP) Phase-2 on "Data Science and Machine Learning" from 07, June'21 to 11, June'21
- * Dr. Mahamuda Sultana Attended 5 Days National Faculty Development Programme on "Implementation of Machine Intelligence Towards Digital India" from 22, June'21 to 25, June'21
- * Dr. Rupak Chakraborty attended AICTE ATAL FDP on "Application of Computers in Biology" from 07, June'21 to 11, June'21 at Galgotias University.
- * Ms. Mandira Banik, Ms. Pallabi Das, and Mr. Rafiqul Islam attended Phase: I of AICTE sponsored Online STTP on Data Science and Machine Learning sponsored by AICTE from 24, May'21 to 28, May'21 organized by Dept. of CSE, Narula Institute of Technology
- * Ms. Sayani Chandra and Ms. Nirupam Saha attended Phase: II of Online STTP on Data Science and Machine Learning sponsored by AICTE from 07, June'21 to 11, June'21
- * Ms. Bidyutmala Saha attended ATAL FDP on Machine Learning and its Application 21, June'21 to 25, June'21
- * Ms. Bidyutmala Saha attended STTP Phase -III on Data Science and Machine Learning 20, June'21 to 24, June'21
- * Mr. Nirupam Saha attended FDP on Electronic Devices, Image Processing and Machine Learning from 11, August'20 to 15, August'20 organized by Department of Electronics and Communication Engineering Guru Nanak Institute Of Technology
- * Mr. Nirupam Saha attended e-SIP from 08, November'20 to 20, November'20 organized by AICTE
- * Mr. Sourish Mitra attended Faculty Development Program on "Technological Advancement in Electric Vehicles" from 17, August'21 to 21, August'21
- * Mr. Sinchan Mazumder and Mr. Krishnendu Chowdhury attended Future Internet Technology from 07, June'21 to 11, June'21 organized by Department of Information Technology in Collaboration with IQAC, JIS College of Engineering.

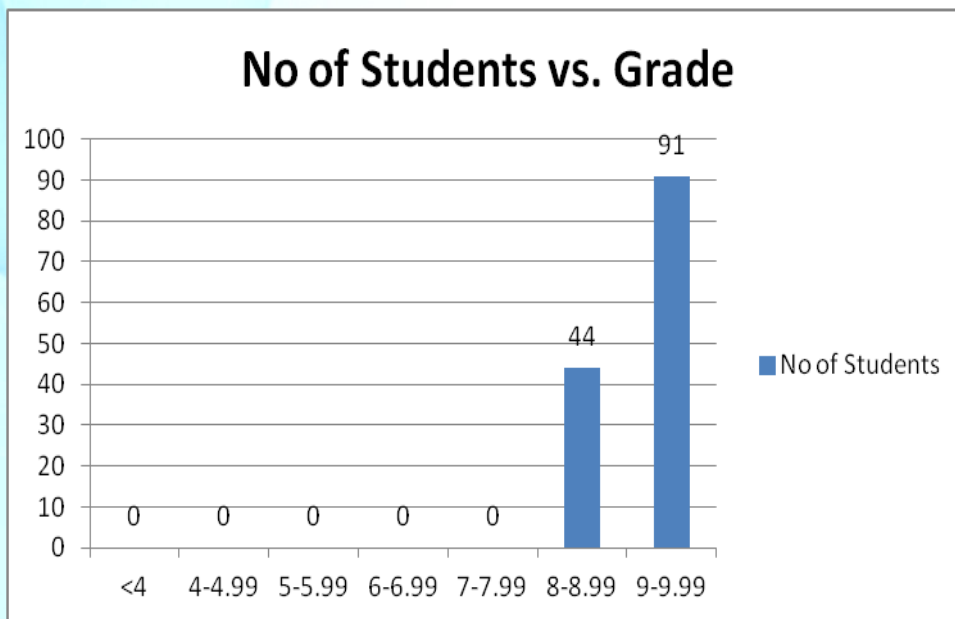
Result Analysis

SGPA WISE RESULT ANALYSIS (CSE) AY 2019-20

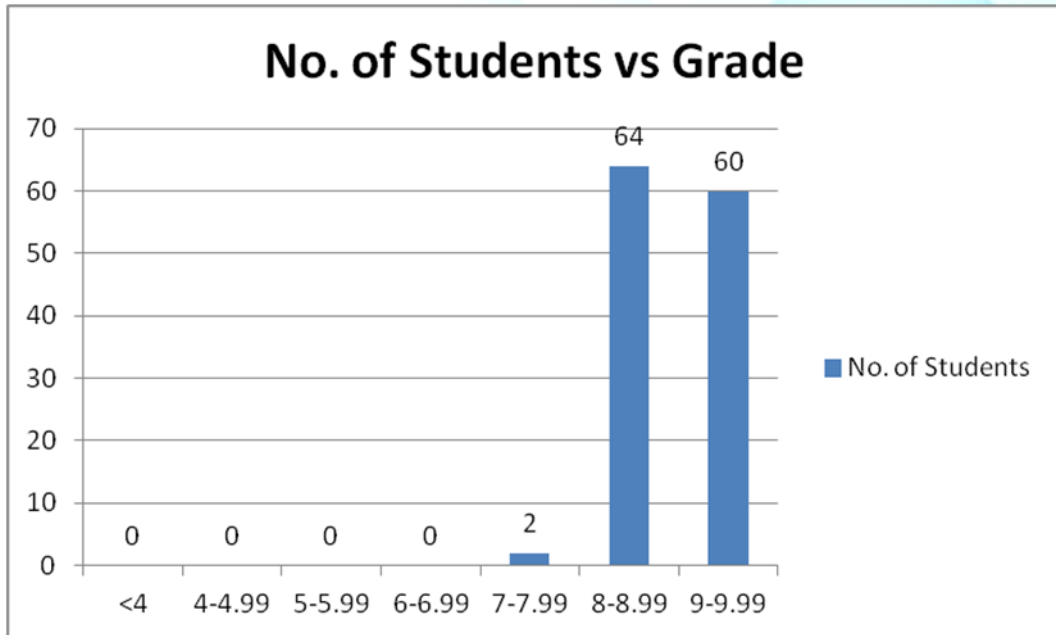
Result Analysis (Autonomy 3rd Sem. 2020-21)



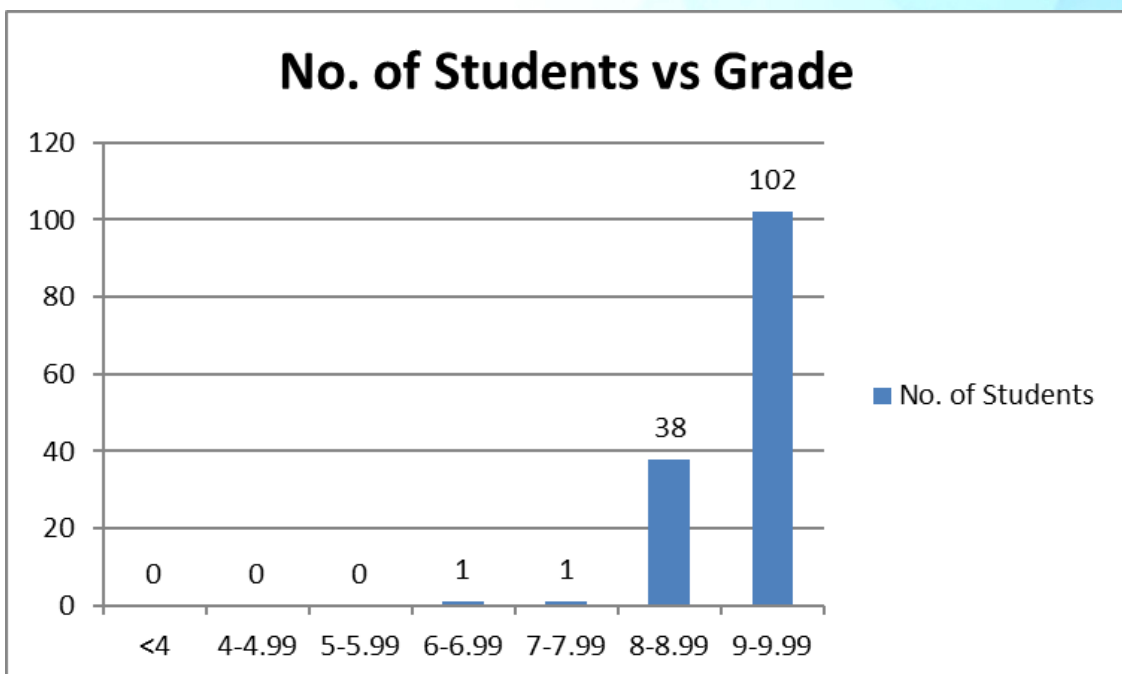
Result Analysis (Autonomy 5th Sem. 2020-21)



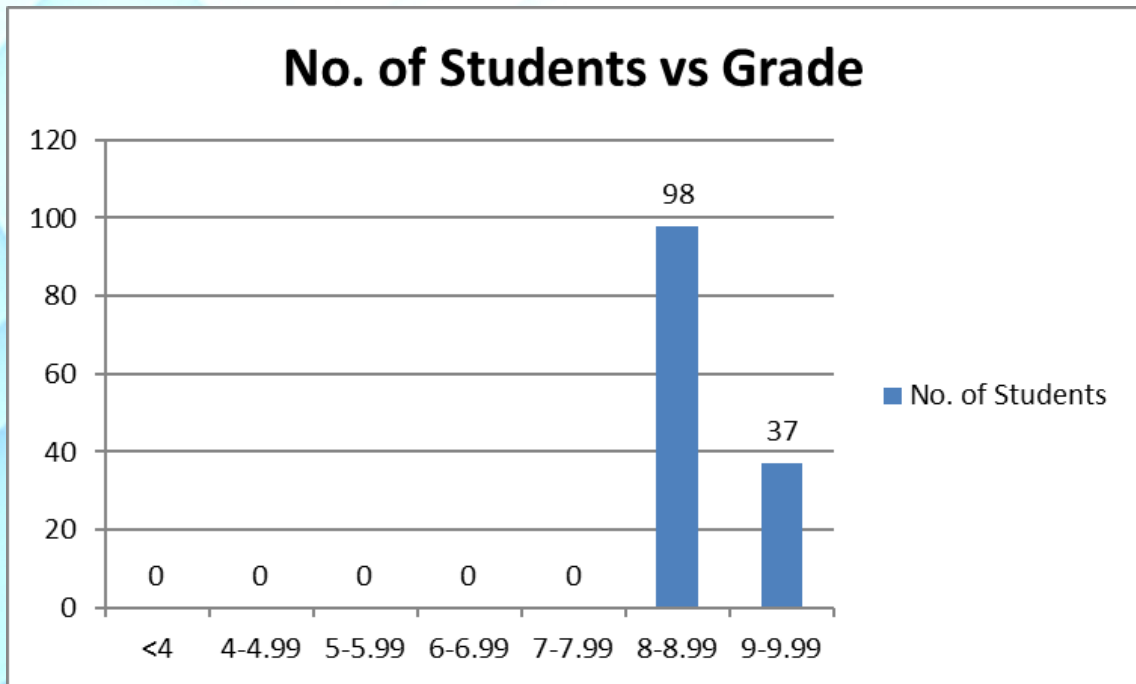
Result Analysis (Autonomy 7th Sem. 2020-21)



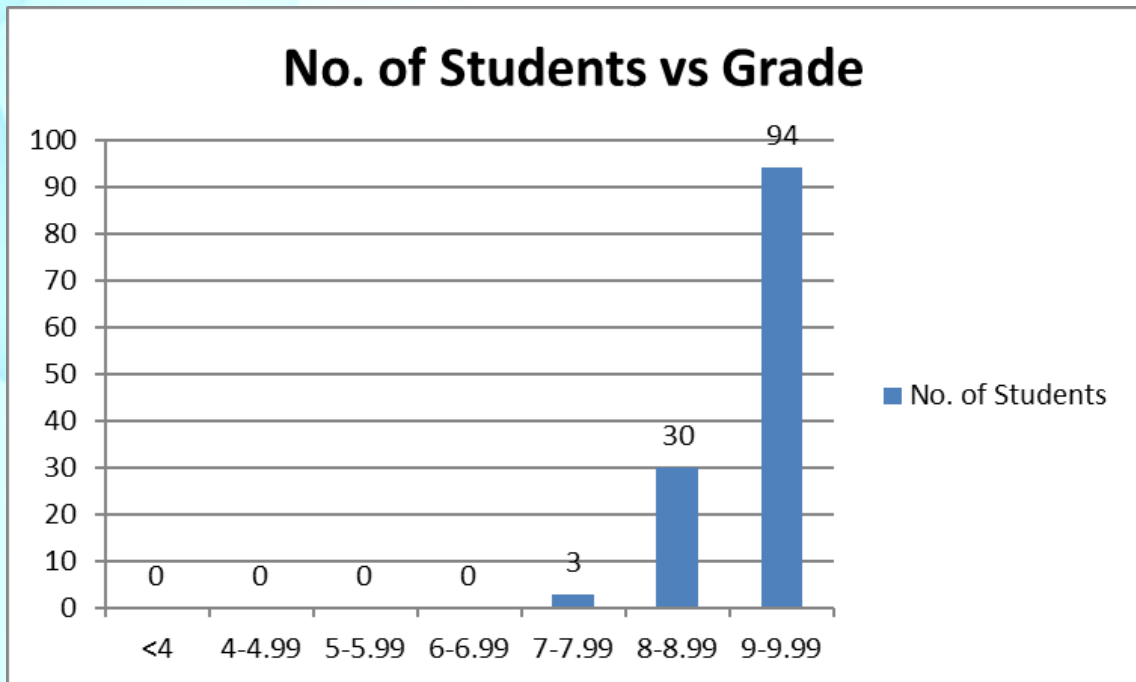
Result Analysis (Autonomy 4th Sem. 2020-21)



Result Analysis (Autonomy 6th Sem. 2020-21)



Result Analysis (Autonomy 8th Sem. 2020-21)



GURU NANAK INSTITUTE OF TECHNOLOGY

Department
of
Electronics & Communication
Engineering

ANNUAL REPORT

2020-21

Name of the Department: Electronics and Communication Engineering

Vision of the department

To impart quality education and excel in research to create centre of excellence in the field of Electronics & Communication Engineering to produce outstanding professionals to become future leaders and responsible citizens.

Mission of the department

DM1: To impart high quality education with innovative teaching-learning methodologies

DM2: To impart knowledge on innovative field of engineering and provide opportunity to work in a team on interdisciplinary projects for empowering ability to become successful professionals

DM3: To carry out high quality research through collaboration and interaction with research organizations and industries

DM4: To motivate to follow professional ethics and encourage to work for the sustainable growth of the society

PEO

PEO I: To build up the concept of core electronics subjects with a strong foundation in the engineering fundamentals to solve, analyze and design the real-life engineering problems.

PEO II: To impart training on emerging technologies and provide opportunity to work in a team on interdisciplinary projects to inculcate leadership quality.

PEO III: To foster interdisciplinary learning environment to succeed in their profession, higher education, research and entrepreneurial development.

PEO IV: To imbibe ethical attitude and life-long learning capability.

Program Outcomes

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

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

Programme Specific Outcomes (PSOs)

PSO 1: To acquire deep analytical knowledge of Electronics and Communication Engineering to meet requirements of global consumers in Devices and communication

sector and contribute to the society through govt. and Non Govt. Sectors.

PSO 2: To develop integrated systems in the field of Electronics and Communication by

applying modern tools and skills to meet the challenges in Industry.

PSO 3: To apply innovation in the field of communication for designing IoT based systems along with AI and ML

Brief overview of the department

The Electronics and Communications Department commenced in the year 2003 and now runs one undergraduate, one postgraduate program (M. Tech in Mobile Communication & Network Technology) and Ph. D. program under JIS University/MAKAUT. The programs offered by the department are the most sought after branch in Engineering by top WBJEE rank holders and other aspirants from across the country. All the programs are accredited by NAAC the undergraduate program is accredited by National Board of Accreditation (NBA) which is compulsorily outcome based, planned to meet the Industry needs and also Research organization. The program contents are upgraded on annual basis with involvement from industry experts, academia and reputed research institutions.

Experienced faculty members all of whom are engineering postgraduates and most of them with PhDs as well, support three core specializations (VLSI &

Microelectronics, Communication, Image processing & Embedded system) in the Department. The curriculum includes a strong self-study component and mini projects at all levels so as to develop the students' independent analytical abilities. Opportunity for innovation and incubation is provided at this stage to successful projects by the institute for industrial standards. The department offers financial support to its young faculty for cutting edge research and also encourages them to undertake sponsored research from industry and government agencies. Presently several projects sponsored by UGC, AICTE are under way in the department. Also, department provides healthy environment to students and faculties to carry out inter department collaborative research in area like robotics, human computer interface, SMART sensor etc. Software Simulation environment (MATLAB, Ansoft HFSS, ORIGIN Tanner EDA Tools, FPGA, Intellisuite, COMSOL, VISSIM etc.) and state of the art are available.

Having undergone such a robust academic program under the supervision of highest quality faculty members, all passing out students of the department are capable of envisage, planning and developing big projects of commercial and research interests in their respective field of expertise.

We strive to train and empower our students who will make the world a better place by using power of engineering principles, techniques and systems.

Welcome to our Department!

publishes periodically several newsletter and magazines to inculcate creative ventures.

HOD's message

Dr. Sunipa Roy - Being the HOD of Electronics and Communication Engineering department, I am pleased to convey my opinion about the departmental development which offers four years full time B-TECH program in ECE since 2003. The course is accredited by NBA. The average passing result is excellent in the department. Almost 10-15% students scored above 9 DGPA. Apart from this we are running P.G. Programs, M-TECH in Electronics & Communication Engineering (MCNT) 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. We have excellent infrastructure, highly experienced faculties and professionals, associated with research work which collectively ensure dynamic and vibrant environment in the campus. Some of the Faculty members of this department went to attend International Conferences in abroad. The department organized so many International & National Educational Programs (i.e. IEEE sponsored Seminars, international conference- published in IEEE Xplore Digital Library, Faculty Development Programs and one day educational Industrial visit). There are so many events like Paper presentation, Poster presentation, Technical Quiz contest, Technical Report writing Contest & Technical Workshop. There are more than 100 publications are done by the faculty & students in National & International Journals & Conferences. Furthermore six UGC projects, one MODROB are completed in last few years with consultancy. Many of our Alumni are settled in abroad and also many of the students are placed in so many reputed Govt sectors and Private Sectors Company and Research Organizations. There is also separate Departmental Library in the ECE department. There are so many high valued simulation software are present in our department like Tanner SPICE, Mentor Graphics, Matlab 2014b, TCAD, HFSS, Qualnet, COMSOL Multiphysics, Intellisuite, TMS Kit with Code Coposer Studio etc. We have also Project lab in our department.

Dr. Sunipa Roy

HOD, ECE Department

Departmental achievements

Student's achievements

SNEHA BAIDYA

Stood second in RGVTUAN article writing competition 1.0

Secured a position in top 18 in essay writing competition conducted by H R COLLEGE of commerce and economics

Stood third in article writing competition 2.0 conducted by RGVTUAN

Top 10 in top content writing challenge by Grab Vantage

Arjyama Seal

Stood 2nd in music competition organized by "IsteharOfficial"

Sayan Roy

Won Gold medal in National Roller Basketball Championship 2020-2021, From 26th to 29th January, 2021, organized by Amateur Federation of Roller Basketball at DAV sr.sec school, sector 8, Chandigarh,

Won Silver in National outdoor- Indoor synthetic Ball cricket Championship 2020-2021, From 26th to 29th January, 2021, organized by Amateur Federation of Roller Basketball at DAV sr.sec school, sector 8, Chandigarh,

Soumya Roy

Stood Runners Up in University cup (Football), Kalyani JIS

Winner in Aarohan 2018 (Fashion Show), Sudhir Chandra Sur, organized by JADAVPUR UNIVERSITY

Participated in Pailan Football Tournament

Stood Second Runner up in Rhapsody (Fashion Show) organized by NIT

Runner Up in IPGMER Football Tournament

Champion in ADAMAS FOOTBALL TOURNAMENT

Mamta Singh, Kashish Rani, Deepak Pandey, Prafulla Kumar Sahani, Ayushi Jaiswal, AtreeGayen

Participated In 1st NATIONAL HACKATHON ON SELF RELIANCE BASED INTELLIGENT INDIA HACKATHON ,Organised By COMPUTER SOCIETY OF INDIA , KOLKATA CHAPTER AND JIS GROUP

GATE Aspirants (2021)

Manab Sarkar **Scored** 42.67

Suchandra Roy **Scored** 23.1

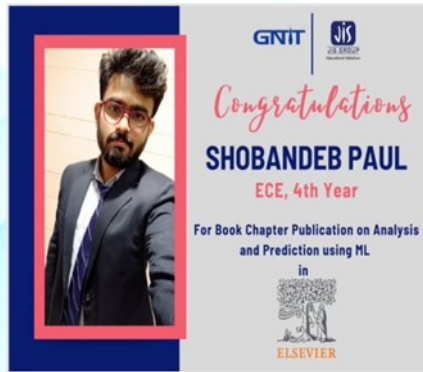
Adrija kundu **Scored** 23.33

- * **Ayon Maji ,Atanu k Bag** won JIS SAMMAN 2021 under category of BEST WEBSITE DESGNING
- * Mrinmoy Kar, Rounak Ghosh, Sudipta Das, Sreya Bhattacharyya, Srinjan Majhi and Swrnila Nath won 1st Prize in E-RRADICATE 2020 COVID-19 Innovation Challenge organized by IE Chapter, ECE @ JIS College of Engineering in association with Institute of Engineers (India) between 10th and 11th April 2020
- * Shobhondeb Paul, Suvasish Paul and Santanu Saha won 8th Prize in E-RRADICATE 2020 COVID-19 Innovation Challenge organized by IE Chapter, ECE @ JIS College of Engineering in association with Institute of Engineers (India) between 10th and 11th April 2020



- * Sudipto Mandol won 1st Position in IIT MADRAS in Photography Marathon contest.
- * Mamata Singh, Deepak Kumar, Atrayee Gayen, Kashish Rani, Prafull Kumar Grand finale in SRIIH, CSI Kolkata
- * Sayan Roy (ECE, 2nd Year) won Champion and grabbed

the GOLD MEDAL in National Roller Basketball Championship 20-21.



(during 26th to 29th January

2021)

- * Sneha Baidya received Elite class (NPTEL Introduction to IOT) Organized by IITKGP in Session – JUL – DEC -2020
- * Sneha Baidya received Silver medal + elite class (NPTEL German-I) Organized by IITKGP in Session – JUL – DEC -2020
- * Sayantani Das received Elite+Gold topper 5%(NPTEL Programming in Java) Organized by IITKGP in Session – JUL – DEC -2020
- * Shirsendu Banerjee received Elite class (NPTEL The joy of computing using Python) Organized by IITKGP in Session – JUL – DEC -2020
- * Souvik Mondal received SILVER + Elite (NPTEL Programing in Java) Organized by IITKGP in Session – JUL – DEC -2020
- * Souvik Mondal received Elite (NPTEL The Joy of Computing using Python) Organized by IITKGP in Session – JUL – DEC -2020
- * Sumedha Bhattachary received SILVER + Elite (topper in top 5%) (NPTEL Soft Skill) Organized by IITKGP in Session – JUL – DEC -2020
- * Prafulla Kumar Sahani received Elite (NPTEL The Joy of Computing using Python) Organized by IITKGP in Session – JUL – DEC -2020
- * Ankit Kumar received Elite (NPTEL The Joy of Computing using Python) Organized by IITKGP in Session – JUL – DEC -2020
- * Romik Banerjee received Elite+Gold (NPTEL ROBOTICS) Organized by IITKGP in Session – JUL – DEC -2020
- * Asmita Chakraborty received Elite(NPTEL Introduction to Internet of Things) Organized by IITKGP in Session – JUL – DEC -2020

- * Sougata Karmakar successfully Completed (Robotics 8 weeks) Organized by IITKGP in Session – JUL – DEC -2020
- * Atiparna Nandy successfully Completed (Robotics 8 weeks) Organized by IITKGP in Session – JUL – DEC -2020



- * Sreyashi Saha successfully Completed (Robotics 8 weeks) Organized by IITKGP in Session – JUL – DEC -2020
- * Koushiki Saha successfully Completed (Robotics 8 weeks) Organized by IITKGP in Session – JUL – DEC -2020
- * ROMIK BANERJEE successfully Completed with Elite (Robotics 8 weeks) Organized by IITKGP in Session – JUL – DEC -2020
- * Koushiki Saha successfully Completed (Robotics 8 weeks) Organized by IITKGP in Session – JUL – DEC -2020
- * Sayan Bhowmick successfully Completed (Robotics 8 weeks) Organized by IITKGP in Session – JUL – DEC -2020

Faculty's achievements

- * Dr. Sunipa Roy received JIS SAMMAN 2021, Date:01.02.21 Category: Faculty with highest amount of Grants received(GNIT) and Category: Faculty with best Research Credential(GNIT) .
- * Department of Electronics and Communication Engineering ,JIS SAMMAN 2021 Category: BEST DEPARTMENT ,Date:01.02.21.
- * Dr.Suparna Biswas received JIS SAMMAN 2021, Date:03.02.21 Category: Best Video Lecture.
- * PalasriDhar received JIS SAMMAN 2021, Date:03.02.21, Category: Highest Number of Student Publication
- * Dr. Sunipa Roy received NPTEL ELITE in Session – JUL – DEC -2020
- * Dr. Suparna Biswas, Palasri Dhar Sayan Roy Chaudhuri, Avali Banerjee received Best Paper award in FEMAS 2.0, January 2021 .
- * Antara Ghosal, Anurima Majumdar received 2nd Best Paper award in FEMAS 2.0, January 2021.
- * Dr. Soumik Poddar received NPTEL Elite in Introductory Neuroscience and Neuro instrumentation , IISC Bangalore ,Session – JUL – DEC -2020 and NPTEL ELITE in Fundamentals of Artificial Intelligence , IIT Guwahati,
Session – JUL – DEC -2020
- * Sayan Roy Chaudhuri awarded Certificate as Top Performing Mentor
for NPTEL online certification course on “ Robotics” Session – JUL– DEC 2020
- * Dr.Avali Banerjee awarded Certificate as Mentor for NPTEL online certification course On “The of Computing using Python” Session – JUL– DEC -2020
- * Antara Ghosal awarded Certificate as Mentor for NPTEL online certification course on “Digital Circuits” Session – JUL– DEC -2020 Dr. Suparna Biswas acted as honorable judge in JISTech2K21, 30th September to 1st October 2021
- * Mrs. Palasri Dhar Published a text book on Introduction to IT System Theory.
- * Received the “Appreciation Certificates” from EE Dept. of GNIT for her valuable contribution in SAMATVA 2K21



Mr. Koushik Pal , Asst. Prof , ECE was invited speaker on One day webinar on Digital Image processing , organised by Vignan's Institute of Management & Technology for women,Hyderabad , Telengana

Dr. Sunipa Roy acted as Invited Speaker in the International conference at Mahatma Gandhi University, Kerala, 12-14 th February 2021



5/25/2021

ECE GNIT

203

Department of Electronics & Communication Engineering

Dr. Sunipa Roy has been selected as "Advisory Board Member" by 'International Institute of Engineers & Researchers on 20th July 2020.



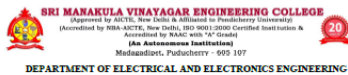
Dr. Sunipa Roy given an 'Invited Talk' arranged by IIC Cell of Dr NGP Institute of technology and delivered his talk on 'Microelectronics Fabrication' on 22th September 2020. Served as 'Mentor' in National Innovation Contest by MHRD, Gol.

5/25/2021

ECE GNIT

204

Dr. Sunipa Roy acted as **Invited Speaker** in the International conference at LONDON, 25 - 26TH November 2020



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



AICTE SPONSORED ONLINE SHORT TERM TRAINING PROGRAMME (STTP)

ON
EMERGING TRENDS IN MICRO/NANO SENSORS AND
ACTUATORS FOR INDUSTRIAL APPLICATION

Date: 26.10.2020 to 31.10.2020

Sl.No.	Days	Forenoon Session (Time: 10.00AM to 11.30AM) Inaugural Function(9.30AM to 10.00AM) Key note by Dr. S. Ashwinakar Dean(Academic) HOD-EEE Sri Manakula Vinayagar Engineering College	Afternoon Session (Time: 2.00PM to 3.30PM)
1	Day-1 26.10.2020	<p>Session - 01</p> <p>Topic: Technological Development of Nanotechnology Superconducting Oxide Based Gas Sensors on Micro machined Silicon Platform</p> <p>Speaker: Dr. Sunipa Roy Head of the Department Electronics & Communication Engineering Guru Nanak Institute of Technology</p>	<p>Session - 02</p> <p>Topic: Recognizing New Concept of Room Temperature Gas Sensor Using Reduce Graphene Oxide Nanohybrid</p> <p>Speaker: Dr. Sunipa Roy Head of the Department Electronics & Communication Engineering Guru Nanak Institute of Technology</p>
2	Day-2 27.10.2020	<p>Session - 03</p> <p>Topic: Fluoronic chemical and biosensor for healthcare applications</p> <p>Speaker: Dr. V.V. Raghavendra Sai Associate Professor, Department of Applied Mechanics IIT Madras, Chennai, India</p>	<p>Session - 04</p> <p>Topic: Micro and Nano Sensors - Actuators for Real Time and Industrial needs</p> <p>Speaker: Mr. N.Mohandass Gnanthi Founder & CEO Sensoviva Technologies, Tiruchirappalli (Tir), TamilNadu (Tamil Nadu), India</p>

Dr. Sunipa Roy acted as Keynote Speaker in AICTE sponsored STTP Programme at Puduchery, Tamilnadu from October 2020 to January 2020

ECE GNIT

205

Dr Sunipa Roy

- * Awarded 'Life Member' by "International Institute of Organized Research" w.e.f. July 2020. I2OR is working on United Nation's Sustainable Development Goals (SDGs) - The Global Goals 2030 specifically for Goal No. 4 i.e Quality Education.
- * Received the "Appreciation Certificates" from JISCE Integrated Hackathon 2K20 , JISCE, Kalyani in June 2020 for her tireless efforts of judging more than 100 teams continuously for 10 days and also being their mentor and guide for the entire occasion
- * Received the "Appreciation Certificates" from JISCE Kalyani, for her valuable contribution in the online review process of IOCER COVID 19 conference
- * Received the "Appreciation Certificates" from JISCE Kalyani, for conducting the One day workshop on Pedagogy Development and Mapping Techniques organized by IQAC on 01.06.2021

- * Dr. Sunipa Roy successfully completed coursera course on “Data Scientist's Toolbox” and received the certificate
- * Dr. Kaushik Roy successfully completed coursera course on “Fundamentals of Network Communication” and received the certificate
- * Dr. Suparna Biswas successfully completed coursera course on “Machine Learning with Python” and received the certificate
- * Dr. Avali Banerjee successfully completed coursera course on “What is Data Science?” and received the certificate
- * Dr. SURAJIT BASAK successfully completed coursera course on “Big Data Emerging Technologies” and received the certificate
- * Palasri Dhar successfully completed coursera course on “Machine Learning with Python” and received the certificate
- * Anurima Majumdar successfully completed coursera course on “Machine Learning with Python” and received the certificate
- * SAYAN ROY CHAUDHURI successfully completed coursera course on “Introduction to the Internet of Things and Embedded Systems” and received the certificate .
- * Mr. Koushik Pal successfully completed coursera course on “Fundamentals of Network Communication” and received the certificate
- * Dr. Sunipa Roy acted as honorable judge in JISTech2K21,30th September to 1st October 2021
- * 30 patents from faculties and students are filed.



Written in accordance with the New Syllabus of 2021 for the 1st Year 2nd Semester of First Year Diploma Engineering Students of "West Bengal State Council of Technical & Vocational Education & Skill Development" and preparing for any Competitive Examination and Joint Entrance Examination. Only Text Book Published for First Year Students.

A Text Book
of
INTRODUCTION TO IT SYSTEM THEORY
First Year – Second Semester

Prof. Gunjan Mukherjee MCA, MTech (C.U.) Asst. Professor, MCA, Department Regent Education & Research Foundation Group of Institution, Bareckpore, Kolkata	Prof. Palasri Dhar B. Tech (ECE), M. Tech. VLSI & Microelectronics Electronics and Communication Department GuruNanak Institute of Technology, Sodepur, Kolkata.
---	--

New Syllabus
With
LABORATORY EXPERIMENTS

LAKSHMI PRAKASHANI
35/B, BENIATOLA LANE, KOLKATA - 700 009
Mobile : 98301 96204, WhatsApp No.: 8240281196
E-mail : gsaibal_1p@yahoo.com
Website : www.lakshmprakashani.com

© Copyright & Publishingright Reserved only Publisher.

Publisher : S. Guha
LAKSHMI PRAKASHANI
35/B, Beniatala Lane, Kolkata - 700 009
Mobile : 98301 96204, WhatsApp No.: 8240281196
E-mail : gsaibal_1p@yahoo.com
Website : www.lakshmprakashani.com

Sales Counter (College Street) :
35/B, Beniatala Lane
Kolkata - 700 009
Mobile : 9831478724
9163685967

Information contained in this work has been obtained by Lakshmi Prakashani, from sources believed to be reliable. However, Lakshmi Prakashani, shall not be responsible for any errors, omissions or damages arising out of use of this information. This work is published with the understanding that Lakshmi Prakashani, and its authors are supplying information but are not attempting to render engineering or other professional services. If such services are required, the assistance of an appropriate professional should be consulted.

1st Edition : 2021

New Syllabus

Cover Concept : Prof. G. Mukherjee & Prof. P. Dhar & Prof. S. Guha.
Cover Design : Mr. Amitava Roy

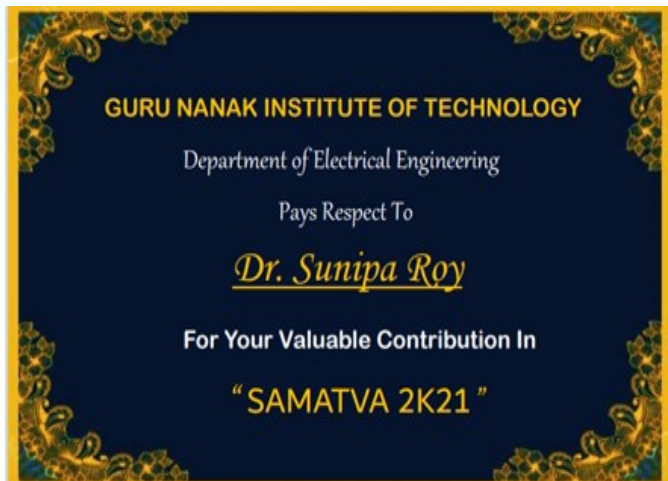
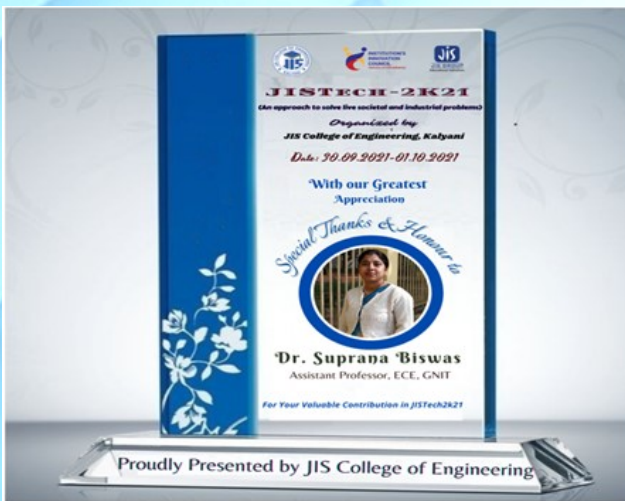
Price : Rs. 300 only

Letter Type Setter : Mr. Chandan Dey

Printer : PAN PRINTERS
10, Hemadri Sen Street
Kolkata - 700 006

ISBN : 978-81-954569-3-2

To be had of
All Leading Reputed Book Sellers (General & Engineering Books) in All Over West Bengal.



Department of Electronics & Communication Engineering

PhD Submitted:
NAME::ANURIMA MAJUMDAR



Ph.D. thesis : Submitted
@
MAKAUT
RESEARCH AREA :

- MICROSTRIP ANTENNA FOR APPLICATIONS IN HIGH SPEED DATA COMMUNICATION
- ULTRA WIDEBAND ANTENNA FOR APPLICATIONS IN SECURED DATA COMMUNICATION
- DUAL POLARISED ULTRA WIDEBAND PATCH ANTENNA FOR APPLICATIONS IN SATELLITE COMMUNICATION, RADAR SYSTEMS AND COMMUNICATION IN MILITARY SECTOR
- WEARABLE ANTENNAS FOR APPLICATIONS IN HEALTH MANAGEMENT SYSTEMS AND MILITARY SECTOR.
- ELECTROMAGNETIC INTERFERENCE WITH HUMAN TISSUE.

MEMBER OF IEEE , LIFE MEMBER OF ISTE(I) , MEMBER OF IE , LIFE MEMBER OF SEMCE, MEMBER OF IEEE(WIE), LIFE MEMBER OF CEGR

GNIT
Autonomous Institute
ECE GNIT 213

Department of Electronics & Communication Engineering

PhD Submitted:



Ms. Antara Ghosal
Ph.D. thesis : Submitted
@
MAKAUT
RESEARCH AREA :

- MICROSTRIP ANTENNA FOR APPLICATIONS IN HIGH SPEED DATA COMMUNICATION
- WIDEBAND ANTENNA FOR APPLICATIONS IN SECURED DATA COMMUNICATION
- ELECTROMAGNETIC INTERFERENCE WITH HUMAN TISSUE.

MEMBER OF IEEE , LIFE MEMBER OF ISTE(I) , MEMBER OF IE , LIFE MEMBER OF SEMCE, MEMBER OF IEEE(WIE), LIFE MEMBER OF CEGR

GNIT
Autonomous Institute
ECE GNIT 214

Departmental Events Organized

The Department organized a cultural event to commemorate the Birth anniversary of Rabindra Nath Thakur

23. Co curricular Activities: Commencement of the semester to till date:



RABI BANDANA-2021



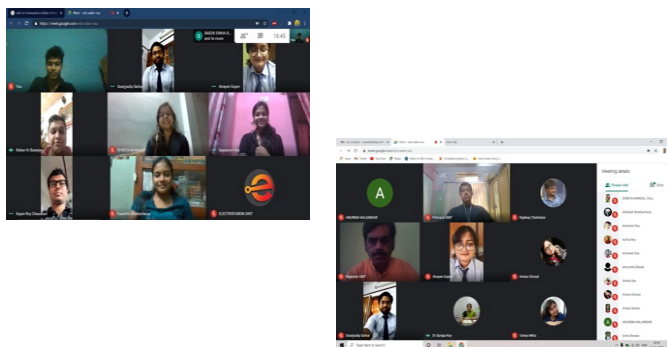
5/25/2021

ECE GNIT

162

Online Inter-college Technical Fest ELECTROFUSION Organized by ECE Dept in association with IE(I) in the period 12.11.2020-13.11.2020 .

Online Inter-college Technical Fest ELECTROFUSION



5/25/2021

ECE GNIT

149

Beyond Curriculum Training B.Tech students by ECE department GNIT

- * **Workshop on "Stress Management and Self Care During COVID-19 Outbreak"** was organized by ECE department GNIT, sponsored by Koushik Pal and Dr. Kaushik Roy dated 04.08.2020 Speaker was Dr. Subhasree Pal .,
- * Webinar on "Networking with CISCO tools" was organized by ECE department GNIT, sponsored by Dr. Kaushik Roy dated 17.09.2020 . Speaker was Mr Suman Mondal (Technical Head Ardent Computech)
- * One Day Webinar on Block Chain was organized by ECE department GNIT dated 23.03.2021 .Speaker was Mr. Mahendra Dutta, Senior Faculty and Project Manager, Ardent Computech Pvt. Ltd.
- * Workshop on Business Model Canvas was organized by IIC Cell Gnit, dated 30.03.2021 ,Speaker was Dr Sunipa Roy HOD ECE.
- * Orientation program by Innovation Ambassador ,was organized by IIC Cell Gnit, dated 31.03.2021 .Speaker was Dr Sunipa Roy HOD ECE.
- * 1 day seminar Track Your Career,was organized by ECE department GNIT .Speakers- Anurima Majumdar and Koushik Pal(Asst. Prof)
- * One Week SDP On "Application Of Data Science, AI & Machine Learning Using Python" For 3rd Year ECE Students was organized by ECE department GNIT ,in the period 20.04.21-24.04.21 .Speakers - Dr. Sunipa Roy, Dr. Suparna Biswas, Sayan Roy Chaudhuri, Dr. Soumik Podder(Faculty, ECE ,GNIT).
- * One Week SDP On "Recent Trends In Engineering And Technology: Machine Learning, AI & Data Science" For 2nd Year ECE Students was organized by ECE department GNIT ,in the period 27.04.21-31.04.21. Speakers - Dr. Sunipa Roy, Dr. Suparna Biswas, Sayan Roy Chaudhuri, Dr. Soumik Podder, Ms. Anurima Majumdar(Faculty,



Special Alumni Drive for Training and Placement guidance in the field of Networking

The departmental T and P cell in collaboration with the IIC cell is organising a 2 day seminar for final year and pre-final year students on 25th May 2021 and 26th May 2021. This seminar will be conducted by one of the departmental Alumni and one Industry expert. The program is coordinated by Anurima Majumdar and Dr. Sunipa Roy, HOD, ECE

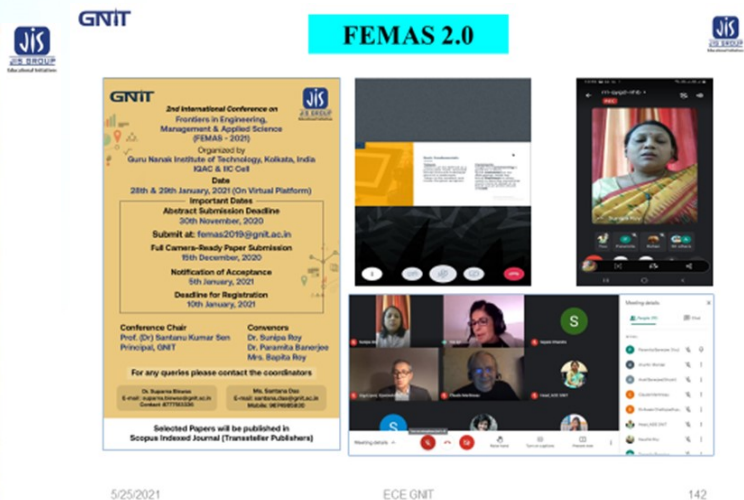
ECE ,GNIT).

- * One day webinar the prospects of on ECE - Know your department (“About FT department of GNIT”),was organized by ECE department Gnit, dated 23.11.2020.Speaker was Dr Sunipa Roy HOD ECE.
- * **Guru Nanak Institute of Technology** organized the **Second Online International Conference** entitled **Frontiers in Engineering, Management and Applied Science (FEMAS2.0)** during **28 – 29 January, 2021** under the convenership of **Dr. Sunipa Roy**

The poster for the FDP on Electronic Devices, Image Processing and Machine Learning features the GNIT logo at the top left, the Institution of Engineers (India) logo at the top center, and the JIS Group logo at the top right. The main title is in large yellow letters. Below the title, it states 'In Association with Institution of Engineers (India)' and 'Organized by Department of Electronics and Communication Engineering, Guru Nanak Institute of Technology'. The date is '24th to 29th August, 2020' and the mode is 'Online Mode'. A central image shows the GNIT building. Below this, five distinguished speakers are listed with their photos and affiliations: Dr. Rajat Subhra Chakraborty (Dept. of computer science and tech., Indian Institute of Technology Kharagpur), Dr. Chandan Kumar Ghosh (Dept. of Material Science and Tech., School of Materials Science & Nanotechnology, Jadavpur University), Dr. Joydeep Sengupta (Dept. of ECE, Visvesvaraya National Institute of Technology, Nagpur), Dr. Arnab Hazra (Dept. of Electrical & Electronics Engg., Birla Institute of Technology & Science (BITS)-Pilani), and Prof. (Dr.) Angsuman Sarkar (Dept. of Electronics and Comm. Engg., Kalyani Government Engineering).

- * Digital Parent Teacher Meet was organized by ECE department Gnit, dated 16.08.2020.
- * Online Alumni Interaction , organized by Dept of ECE dated 29.11.2020. Speakers-Ms Oindrila Ghatak(Alumni -ECE),pursuing her M.Sc from University of Edinburgh , Mr.Swarnava Ghosh(Alumni-DETCE),pursuing higher study ,Ms. Sushmita Chatterjee (Alumni DETCE)working at People Nest Consulting Pvt. Ltd and Sreyashi Saha(Alumni DETC).
- * Research Matter Powered by MHRD-Institution Innovation Council @GNIT dated 13.07.2020 . Speakers-Sunny Sanyal, Subhadeep Sahoo
- * Industry Mentor Meet organized by Dept of ECE,dated 29.11.2020 .Speakers- Mr. Rajmohan Dey Sarkar , Director Technology Services, Ardent Computech Pvt. Ltd and Mr. Pranab Sinha Choudhury, Ex Dy General Manager(Maint.), W.B.P.D.C.L, A Govt. of West Bengal Enterprise.

- * ELECTROFUSION 2021 organized by Dept of ECE in the period 01.11.2021-02.11.2021. Speakers-Dr.Sunipa Roy, HOD, ECE, Prof.(Dr.) Santanu Kr. Sen, Principal, GNIT
- * Webinar on Knowing The Universe - The space book was organized by ECE department Gnit, dated 03.07.21. Speakers Anarghya Bose ,B.TECH, CSE , 1st Year Founder @ GNIT MAHAKASH-The Space Club Sayantan Bhattacharya Process Analyst at GlobSyn 3rd Life, B.TECH ECE(GNIT), M.Tech (ECE)1st Year, GNIT
- * Virtual Industry Visit: "From Sand to Silicon : the making of a chip | intel" organized by Dept of ECE dated 09.02.2021
- * One day Seminar on "Track your career" organized by Dept of ECE ,dated 08.02.21
- * Two day Virtual Industry visit in collaboration with Webskitters Academy, dated 11.4.21 and 16.4.21



- * Workshop on CHATBOT for students was organized by ECE department GNIT ,in the period 31.5.2021 - 4.6.2021. Speakers- Mr.Sudip Kumar Roy , Software Engineer ,Accuvate solution pvt. ltd
- * Interschool Digital poster making competition was organized by ECE department GNIT on World Environment Day, in the period 07.-6.2021-11.06.2021
- * Workshop on "Open your own You Tube Channel- Run your start up" was organized by ECE department GNIT,dated 23.06.2021. Resource Person- Sayan Ghorui, Shibas Sen, Tusar Patra, Sandipan saha.
- * Workshop on. "Learn Video Editing Software" was organized by ECE department GNIT,dated 18.06.21. Resource Person- Arnab Biswas
- * Webinar on Knowing The Universe - The space book was organized by ECE department Gnit, dated 03.07.21. Speakers Anarghya Bose ,B.TECH, CSE , 1st Year Founder @ GNIT


MAHAKASH-The Space Club Sayantan Bhattacharya Process Analyst at Globsyn 3rd Life, B.TECH ECE(GNIT), M.Tech (ECE)1st Year, GNIT.

ECE NEWSLETTER - INSIGHT - V1.0
<https://drive.google.com/file/d/1tC40RCcw0grOHJIRP06xE8wKyJ5KUbfTF/view?usp=sharing>

ECE NEWSLETTER - INSIGHT - V2.0
<https://drive.google.com/file/d/1rMkiUEe0erdFFTsUzsevMcuQ-2Z8LAuw/view?usp=sharing>

Quasi NEWSLETTER - INSIGHT - V3.0
https://drive.google.com/file/d/1_RUDi8ZLaguefW6N7ohHgsISb3F1XsJf/view?usp=sharing

Quasi NEWSLETTER - INSIGHT - V 4.0
https://drive.google.com/file/d/1_RUDi8ZLaguefW6N7ohHgsISb3F1XsJf/view?usp=sharing



Yearly E-magazine published on
4TH August 2020


<https://drive.google.com/file/d/1K3gsw1GBvHrpS2XtVSgrbkeSPWlrScs/view?usp=sharing>

ISR ACTIVITY BY THE DEPARTMENT

Students and Faculty members of ECE Department worked with PRAGAATI in this COVID Crisis, who are providing leads on the resources needed. They are verifying leads themselves and communicating directly with the needful-no forwarding without verification to save the family in need from harassment. The main jobs done are verifying information and database on lead of oxygen cylinder (fresh/refill) , Plasma , Blood, community kitchens , fetching verified data on hospital bed availability from Govt. Web portal or directly calling the hospitals to check the information. Many people reached to PRAGAATI through personal contact or Facebook page. Multiple cases were solved and many people got help from the club .One App and website is also developed to maintain database.

PRAGAATI APP DOWNLOAD
LINK: <https://www.growevery.org/blog/direct%20share/download/vd7iVx8OCLeobYm>

PRAGAATI WEBSITE
LINK:
<https://pragaati.growevery.org>



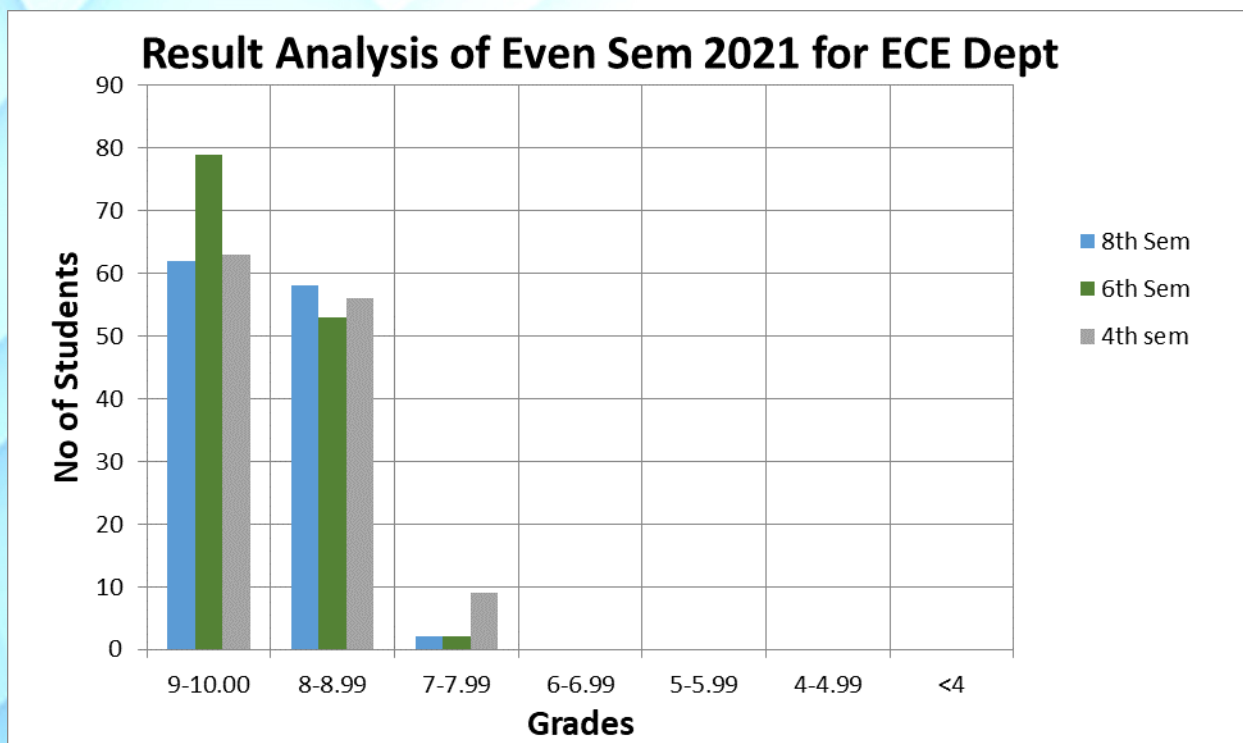
WEBINAR/SEMINAR/CONFERENCE/WORKSHOP PARTICIPATED

- * Dr. Suparna Biswas has attended the Conference (IOCER-2020), dated 08.10.20
- * Dr. Avali Banerjee has attended Online Two weeks FDP on “Machine Learning Techniques for Imaging and Healthcare with Python.” **Sponsored by** AICTE from 28.01.2021 to 10.02.2021
- * Dr. Avali Banerjee has attended Online Inculcating Universal Human Values in Technical Education . **Sponsored by** AICTE from 28.01.2021 to 22.01.2021
- * Dr. Avali Banerjee has attended Online FDP on “Wearable Devices”. **Sponsored by** AICTE from 14.12.2020 to 18.12.2020
- * Dr. Avali Banerjee has attended One Week Short Term Training Program on Recent Advances and Trends in Machine Learning: Theory and Application. **Sponsored by** AICTE from 07.12.2020 to 12.12.2020.
- * Dr. Avali Banerjee has attended Online FDP on “Augmented Reality (AR)/ Virtual Reality (VR)” Sponsored by AICTE from 23.11.2020 to 27.12.2020.
- * Dr. Sunipa Roy has attended Inculcating Universal Human Values in Technical Education Sponsored by AICTE from 28.01.2021 to 22.01.2021

- * All faculty members and JTAs have attended Webinar on Digital pedagogy organized by GNIT, dated 30.05.2020.
- * All faculty members and JTAs have attended Virtual industry visit (Global Foundries) organized by ECE, GNIT, dated 19.05.2020.
- * All faculty members and JTAs have attended Virtual industry visit organized by ECE, GNIT, dated 9.02.2020.
- * All faculty members and JTAs have attended Track your career organized by ECE, GNIT, dated 08.02.2020.
- * All faculty members and JTAs have attended Webinar on Block Chain organized by ECE, GNIT, dated 9.02.2020.
- * Dr. Sunipa Roy has attended Assessment and accreditation NAAC. **Sponsored by** NAAC, dated 22.12.2020.
- * Dr. Sunipa Roy and Dr. Soumik Podder have attended E yantra lab set up. **Sponsored by** IIT Bombay, dated 21.03.2021.
- * Dr. Surajit Basak has attended Information Security: Approaches in Application to Physical Layer **Sponsored by** Dept. of IT, IEST-Shibpur, from 11.01.2021 to 15.01.2021.
- * Dr. Surajit Basak has attended Green IoT for Green Environment - Phase I, **Sponsored by** AICTE AQIS and GNIT-AEIE, from 19.04.2021 to 24.04.2021.
- * Dr. Surajit Basak and Dr. Soumik Podder have attended Green IoT for Green Environment - Phase II. **Sponsored by** AICTE AQIS and GNIT-AEIE, from 10.05.2021 to 15.05.2021.
- * Dr. Soumik Podder has attended Green IoT for Green Environment - Phase III. **Sponsored by** AICTE AQIS and GNIT-AEIE, from 31.05.2021 to 05.06.2021.
- * Dr. Soumik Podder has attended Green IoT for Green Environment-Phase IV.

- * **Sponsored by** AICTE AQIS and GNIT-AEIE, from 21.06.2021 to 26.06.2021.
- * Dr. Soumik Podder has attended STTP on “ Data Science and Machine Learning. **Sponsored by** AICTE and CSE-NIT, from 24.05.2021 to 28.05.2021.
- * Dr. Soumik Podder has attended Capsule Lab Webinar Series . **Sponsored by** AICTE and CSE-NIT, from 24.05.2021 to 28.05.2021
- * Dr. Avali Banerjee has attended Online FDP on “Wearable Devices”. **Sponsored by** ATAL, from 14.12.2020 to 18.12.2021.
- * Dr Sunipa Roy has attended Multi-Disciplinary Design Optimisation in Engineering: Basics. **Sponsored by** ATAL, from 14/06/2021 to 18/06/2021
- * Palasri Dhar has attended Multi-Disciplinary Design Optimisation in Engineering: Basics. **Sponsored by** ATAL, from 14/06/2021 to 18/06/2021.
- * Sayan Roy Chaudhuri has attended IoT with Machine Learning & Artificial Intelligence **Sponsored by** ATAL, from 04/10/2021 to 08/10/2021.

Result Analysis



GURU NANAK INSTITUTE OF TECHNOLOGY

Department
of
Electrical Engineering

ANNUAL REPORT

2020-21

Name of the Department: Electrical Engineering

Vision of the department

To produce new generation technologists and entrepreneurs with innovation and advanced research by inculcating world class education to meet industry expectations and impart sustainable growth of the society in global perspective.

Mission of the department

- * DM1: To impart quality education and innovative teaching learning methodologies.
- * DM2: To develop professionals with the ability of critical thinking and innovativeness to face the real-life challenges in their respective domain.
- * DM3: To inculcate an urge of entrepreneurship, research and pursue higher studies.
- * DM4: To imbibe the spirit of moral values and ethics for the sustainable growth of the society.

PEO

PEO1: To implant strong foundation in Science, Mathematics and Electrical Engineering to become successful professionals

PEO2: To impart knowledge on emerging technologies and entrepreneurship skills to produce future leaders

PEO3: To train students in developing ethical attitudes, strong communication skills and capacity to relate engineering issues in social and environmental context.

PEO4: To facilitate opportunity to work in a team in interdisciplinary projects for building leadership qualities.

Program Outcomes

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

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

Programme Specific Outcomes (PSOs)

PSO1: To explore the ideas, methodologies and cutting-edge technologies in Renewable Energy and Electric Vehicles for gaining competence to solve energy related problems.

PSO2: To analyze, design and provide an engineering solution applying knowledge of Embedded System, Smart Grid, Power Electronics and Electric Drives.

PSO3: To use modern software tools for simulation, analysis and designing electrical and electronic Systems.

Brief overview of the department

The department of Electrical Engineering, Guru Nanak Institute of Technology, Kolkata-700114, has started its auspicious academic journey, under West Bengal University of Technology, presently, MAKAUT-West Bengal, from the year 2003. The department got NBA in 2009 and then again in 2014 for its excellent performance in the arena of technical education. The department has well-equipped Laboratories, qualified and experienced Faculty Members and Technical Staff to educate and train the budding engineers in the areas of Electrical Engineering, applied sciences and humanities, along with training courses on soft skills and aptitude, ensuring high campus placements and admissions into Institutes of higher learning and research.

Course Offered

- * 4-years' B.Tech (Electrical Engineering) from Autonomous Institution GNIT, Affiliated to MAKAUT, West Bengal

Core Strength

- * The Department of EE has well qualified and dedicated faculty.
- * The Department has state-of-the-art Lab facilities like Machine Lab, Power System and SCADA Lab, Control System Lab, Power Electronics & Drives Lab, Measurement Lab, Circuit Theory Lab, to name a few.
- * World class software like MATLAB, PSCAD, ETAP, MULTISIM, PSIM, Lab-View, SCADA are available in the department to work on top-of-the line projects in various areas of electrical engineering.
- * Excellent central library including separate departmental library and computing, Internet facilities are available.
- * The department is always enthusiastic in conducting various seminars and workshops for the faculty and students to permeate advances in technology.
- * Mechanism is available for direct mentoring of students by faculty, interacting with students, and directing them to upgrade their skills.
- * Students are placed in reputed Core Industries as well as Software/IT Companies.

HOD's message

We are going through an unprecedented global predicament today. Each one of us and the entire world is affected by the coronavirus pandemic; our economy, our families, communities and our entire way of life are adversely affected by the scare of infection and contagion. In these difficult and anxious times, I wanted to reach out to you through Special Edition Newsletter "Electro Impression" and update you how Electrical Engineering (EE) Department at Guru Nanak Institute of Technology (GNIT), is continuing online classes, International & National Webinars, Parent Teachers Meet, Alumni Meet and all sorts of digital activities sportingly and enthusiastically during the ongoing Lockdown period to keep all their Students busy and restricted to Stay at Home. I would express my thanks to the faculty for their tireless efforts that have come to fruition in the form of this magazine. I wish that this Newsletter would bring a great motivation among students to do their best.

Department of Electrical Engineering

I would also like to express my solidarity with you and your family. I have prayed for you and your families; for your safety and health.

Dr. Barnali Kundu
HOD, EE Dept.

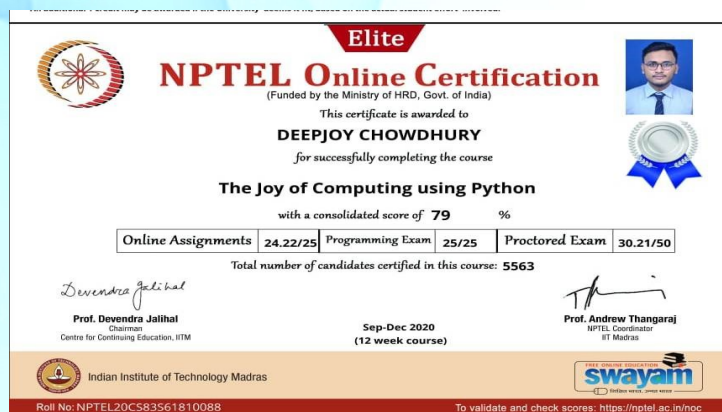
Departmental achievements

Student's Achievements Academic Achievement

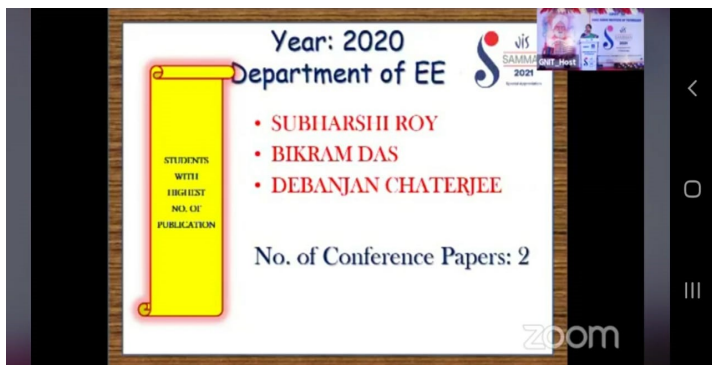
Name of Student	Details of Achievement
Kinkini Adhikari	Successfully completed NPTEL Course on Control Systems in Elite
Gourab Bag	Successfully completed NPTEL Course on Electrical Machine -I in Elite (69% marks) Category, July- Dec,2020
Deepjoy Chowdhury	Successfully completed NPTEL Course on The Joy of Computing using Python in Elite (79% marks) Category, July- Dec,2020
ROHAN SENGUPTA	Successfully completed NPTEL Course on Control Systems in Elite (63% marks) Category, July- Dec,2020
S. K. Sahil	Secured 1st position in the event Band competition, ICOC 2020
Sk Rizwan Ali	Score 76% marks in the Python and R Programming Pan India Quiz
SHUVAM PATRA, 3 rd year	Developed a MP3 Player during Python Programming training with association of Web Skitters Academy 13 June - 9 July 2020, Secured 1st position in the Paper Presentation in Samatva 2020
Debjit Sarkar	Received award for completion E –Quiz with 100% marks , orga-
Kinkini Adhikari	Received Second Runner up in the Event of <i>Vignette, the art Event</i> of FELICIFIC v1.0, organized by GNIT Media,2020
Swapnil Dutta Gupta	Score 65% marks in the National level Quiz on Basics of Welding, organized by Calcutta Institute of Technology
Morsum Roy	Winner Quiz Master in SAMATVA 2K20
Astik oraon	Runners up of Magnus 2k20 Football Tournament(JIMS & BBIT)
Ajit Kumar	1st Runner-Up in Inter College Quiz Competition "QUIZ INFO-TECH 2020" on 27th -28th June 2020.
Alangkrita Chakra borty	Participated on Departmental Farewell by EE,GNIT(20-07-2020)
Monojit Biswas	Winner Quiz Master in SAMATVA 2K20
Dinesh Besra	Runners Up - Cloud 9 in SAMATVA 2K20
Pallabi Banerjee	Winner the Delivarance in SAMATVA 2K20
Toton Boidya	Winner the Delivarance in SAMATVA 2K20

Department of Electrical Engineering

Suvam Patra	Winner Inventech in SAMATVA 2K20
Sounak Das	Runners up Inventech in SAMATVA 2K20
Adrija Ghosh	Runners up Inventech in SAMATVA 2K20
Aditya Das	Runners up of Magnus 2k20 Football Tournament(JIMS & BBIT)
Astik Oraon	1st Runner Up Magnus 2020 Organized By Bbit And Jagganath Gupta Institute Of Medical Science And Hospital On 5/6/7 th February, 2021
ANIK DASGUPTA	Received 'JIS SAMMAN 2021' for Best Student Award (2016)(B. Tech)
NILASHA SEN	Received 'JIS SAMMAN 2021' for Best Student Award (2017)(B. Tech)
RAJESH DUTTA	Received 'JIS SAMMAN 2021' for Best Student Award (2018) (B. Tech)
ANKIT SHARMA	Received 'JIS SAMMAN 2021' for Best Student Award (2018)
JOY SARKAR	Received 'JIS SAMMAN 2021' for Best Student Award (2019) (B. Tech)
DEBANJAN CHATTERJEE	Received 'JIS SAMMAN 2021' for Best Student Award (2019)
AVIJIT MONDAL	Received 'JIS SAMMAN 2021' for Best Student Award (2020) (B. Tech)
NAYAN HAZRA	Received 'JIS SAMMAN 2021' for Best Student Award (2020)
Arijit Seth	Received 'JIS SAMMAN 2021' for Students With Highest No. Of Publication (2017)
Subhajit Dutta, Debasish Agasti ,Ritam Roy, Soudip Mal, Sounak Ghosh,Rohan Pal, Sourav Sarkar, Shouvik Sarma Chowdhury	Received 'JIS SAMMAN 2021' for Students With Highest No. of Publication (2018)
Syead Nawas Sarif , Tanmoy Das	Received 'JIS SAMMAN 2021' for Students With Highest No. of Publication (2019)
Subharshi Roy, Bikram Das, Debanjan Chatterjee	Received 'JIS SAMMAN 2021' for Students With Highest No. of Publication (2020)



Deepjoy Chowdhury, Successfully completed NPTEL Course on The Joy of Computing using Python in Elite (79% marks) Category, July-Dec,2020



Subharshi Roy, Bikram Das, Debanjan Chatterjee, Received 'JIS SAMMAN 2021' for Students With Highest No. of Publication (2020)



Mrs. Sayani Deb Roy, Alumni, EE Presented the Inaugural Song: "Guru Bramhaa..." in JIS SAMMAN: 2020

Faculty's Achievements

Name of the Faculty	Details of Achievement
Dr. Barnali Kundu	Successfully completed NPTEL Course on DC Microgrid and Control System in Elite Category, July- Dec,2020
Dr. Debasree Saha	Successfully completed NPTEL Course on Power System Protection and switchgear in Elite Category, July- Dec,2020
	Successfully completed NPTEL Course on Microprocessor and Microcontroller in Elite Category, Jan - April, 2021
Dr. Aveek Chattopadhyaya	Successfully completed NPTEL Course on DC Microgrid and Control System in Elite Category, July- Dec,2020
Mr. Susovan Dutta	Successfully completed NPTEL Course on Introduction to Research in Elite Category, July - Dec,2020
	Successfully completed NPTEL Course on Power System Engineering in Elite Category, Jan - April, 2021

Department of Electrical Engineering

Ms. Rikta Majumder	Successfully completed NPTEL Course on Power System Protection and switchgear in Elite Category, July- Dec,2020
	Successfully completed NPTEL Course on Introduction to Research in Elite Category, July- Dec,2020
Ms. Madhumita Chakraborty	Successfully completed NPTEL Course on DC Microgrid and Control System in Elite Category, July- Dec,2020
Mr. Suman Ghosh	Successfully completed NPTEL Course on DC Microgrid and Control System in Elite Category, July- Dec,2020
Dr. Debasree Saha	Acknowledged as reviewer from International Transactions on Electrical Energy Systems WILEY.
Dr. Barnali Kundu	Presented paper in 7th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON 2020), 27th - 29th November ,2020 (IEEE Conference)
Dr. Barnali Kundu	Acknowledged as reviewer from UPCON 2020
Mr. Susovan Dutta	Received JIS Samman award in the category of Best video lecture preparation
Mr. Susovan Dutta	Created MOOCs course on POWER SYSTEM for NIKHIL BHARAT COUNCIL in June 2021
Mr. Suman Ghosh	Received JIS Samman award in the category of highest number of publication.
Shyamal Kumar Roy	Received 'JIS SAMMAN 2021' for Badminton Men's Singles Semifinalist
Ms. Subhra Sen	Received JIS Samman award in the category of Best practical demonstration video preparation



Dr. Barnali Kundu presented paper in 7th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON 2020), 27th - 29th November ,2020 (IEEE Conference)



Dr. Debasree Saha has been acknowledged as reviewer from International Transactions on Electrical Energy Systems WILEY.

Mr. Susovan Dutta has received JIS Samman award in the category of Best video lecture preparation

Mr. Suman Ghosh has received JIS Samman award in the category of highest number of publication.

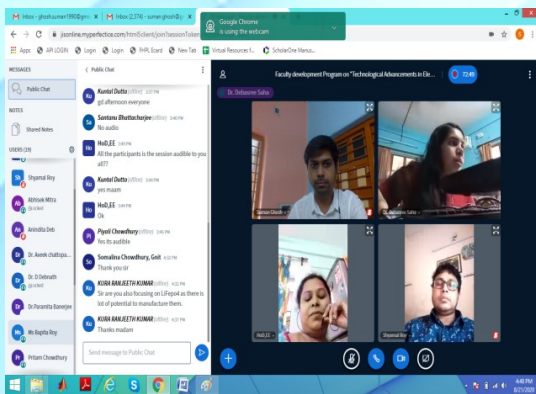
Mr. Suman Ghosh has received JIS Samman award in the category of highest number of publication.

Ms. Subhra Sen has received JIS Samman award in the category of Best practical demonstration video preparation

Departmental events

International Webinar entitled "Automotive Radar Signal Processing" by Mr. Lucas Well, Firmware Engineering, Preco Electronics, Boise, ID, USA, organized by EE Dept., GNIT on 15th July, 2020.

- * Covid-19 pandemic situation, Electrical Engineering, GNIT had organized a Faculty Development Programme (FDP) entitled “Technological Advancements in Electric Vehicle Application” during 17th August – 21st August, 2020 where the Resource Persons (Speakers) were from various corners of the World i.e.: Industry, Academia and Research Organizations. And the



participants were from various engineering and technology colleges of West Bengal. It was a brilliant mixture of Industry, Academia, Research and both the Speakers as well as the participants enjoyed the programme as understood from their feedback.

- * Webinar on “DC-AC Power conversion: Multi-level Inverters” by Mr. BIDYUT MAHATO, SENIOR RESEARCH FELLOW, IIT(ISM), DHANBAD (Alumni Interaction) organized by EE Dept., GNIT on 12.02.21.

- *Webinar on “Locomotive Computer Based Interlocking System” by Ms. Polomee Sur, Senior System V&V Designer, Alstom Transport India Ltd” organized by EE Dept., GNIT on 05.12.2020.

- *Webinar on Python organized by EE Dept., GNIT and Ardent Computech Pvt. Ltd on 28.11.2020

- *Workshop on Expert session on Electric Vehicle by Debanand Singdeo Education Technical Evangelist at MathWorks India Private Limited (Pune). Alumni:Visva Bharati, Santinike tan, IIT Bombay, Dept of Energy Tech., Aalborg University, Denmark organized by EE Dept., GNIT and Mathworks on 11.02.2021

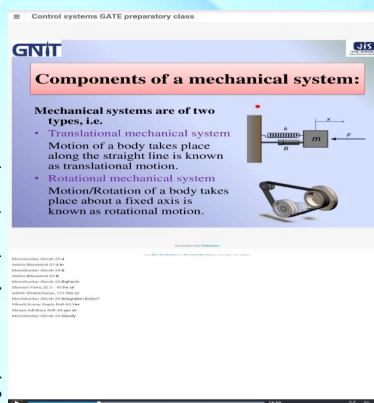
- *Workshop on Expert Session on Battery Modeling by Ramana Anchuri, Engineer of MathWorks organized by EE Dept., GNIT and Mathworks on 12.02.2021.

*Webinar entitled “Impact of Solar Technology on Renewable Energy Sector” by Mr. Somnath Chatterjee, Skillelectron India Pvt. Ltd. organized by Skillelectron India Pvt. Ltd. And Dept. of Electrical Engineering, GNIT on 06.02.2021

*Webinar on “Battery Testing” by Mr. Prasad Bhat, Deputy General Manager, Bio Logic Science Instruments Pvt. Ltd. organized by EE Dept., GNIT on 19.05.2021.

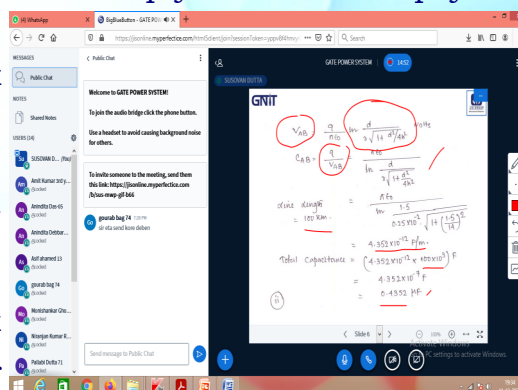
*Online Industry Visit by Mr. Soumik Nandi, Alumni EE, Shift Engineer, United Breweries Limited organized by EE Dept., GNIT on 22.05.2021.

*EE department has started Online GATE coaching classes for the B.Tech students in different online platform like Whiteboard of Myperfectice, Zoom, Whatsapp, Google classroom and various other means. In the first phase we have started with 4 important subjects from the month of December, 2020, namely 1. Power System. 2. Control System. 3. Circuit theory and network. 4. Analog electronics.



*Online Tech Fest "SAMATVA'2020" organized by EE Dept association with JIS group, Ardent Computech and Poddar System and Services during 16.10.2020 -18.10.2020 to imply the state of psychostability and composure, which enabled the students to unwind their mind beyond the textbook theory resulting into brainstorming, designing, building and testing their performance, hence, enabling students from a variety of disciplines by challenging them in combat with hands-on experience.

*Electrical Engineering Department, Guru Nanak Institute of Technology have organized an inter



school quiz competition “ INTER SCHOOL ONLINE QUIZ COMPETITION 2020” in Online mode on 15th and 16th of August 2020 under Admission drive.

*Panel Discussion on “How to Make Yourself Ready to Start Your Career in the Software Industry” by Alumnus Mr. Debasis Agasti, Senior Analyst, Capgemini and Mr. Sourav Adhikari, Associate Consultant, Infosys organized by EE Dept., GNIT on 21.11.20

*Know your Department, Alumni Interaction by

Alumnus Mr. Debasis Agasti, Senior Analyst, Capgemini and Mr. Sourav Adhikari, Associate Consultant, Infosys organized by EE Dept., GNIT on 21.11.20

*EE Department has organized a Workshop on “5-Days Hands on Exposure on Arduino Microcontroller Design, Development & Solution with Arduino Systems” held during 5th April-9th April,2021. No Participants: 56 (EE, ECE, CSE, IT, AEIE). Trainer: B.Tech Final yr EE Students

of

*Online Photography Competition for school students of IX to XII standard organized by EE Dept., GNIT on 15th May, 2021

*Parent Teacher Meet for B. Tech organized by EE Dept., GNIT on 22.05.2021

*Online Industry-Alumni Meet by Mr. Arnab Banerjee, Manager (Power Station), R&M, WBPDCCL organized by EE Dept., GNIT on 26.06.21

*Workshop on " Robot Making" for School Students(IX-XII) 4 days workshop on " Robot Making" for

Department of Electrical Engineering

School students by Mr Subharshi Roy and Mr Debanjan Chatterjee, Alumni,GNIT on 10.06.2021, 17.06.2021, 24.06.2021, 29.06.2021.

*EE Department has organized a Beyond Curriculum Training on “Applications of MATLAB in Power Electronics and Power Systems” by Dr. Barnali Kundu, Mr. Susovan Dutta, Mr Suman Ghosh, Mrs. Priyanka Dutta, Dr. Aweek Chattopadhyaya during 26th -30th July, 2021 for Final year B. Tech students.

*EE Department has organized a Beyond Curriculum Training on “Fundamentals of MATLAB and its application” by Dr. Debasree Saha, Madhumita Chakrobarty, Amit Debnath, Pritam Chowdhury, Shyamal Kr. Roy during 26th -30th July, 2021 for 2nd and 3rd year B. Tech students.

*Published Online Special Edition of Newsletter, Electro Impression Vol. 6 Issue: 1 (July 2020-March 2021).

*Link: <https://drive.google.com/file/d/1tbzPrm9UXI2iRAYN7Cod5Ore0RAc9Ooq/view?usp=sharing>

Faculty Participation

- * Dr. Barnali Kundu attended Industry Webinar on Locomotive Computer based Interlocking System on 5th December 2020 Organized by Dept. of Electrical Engineering, GNIT.
- * Dr. Barnali Kundu attended Online FDP on LaTeX during 29/6/2020 to 03/07/2020 Organized by SPOKEN Tutorial, IIT Bombay, Department of Information Technology, Mizoram University.
- * Dr. Barnali Kundu attended AICTE Sponsored STTP on Digital Energy Network: IoT Applications in Smart Grid Systems during 8-13 Feb, 2021 Organized by JISCE.
- * Dr. Barnali Kundu attended Workshop on Expert session on Electric Vehicle on 11th Feb, 2021 Organized by Mathworks & EE, GNIT.
- * Dr. Barnali Kundu attended Workshop on Expert session on Expert Session on Battery Modeling on 12th Feb, 2021 Organized by Mathworks & EE, GNIT.
- * Dr. Barnali Kundu attended One week faculty development program on Research and Technical Challenges in Energy and Power System (RTCEPS 2020) during 29.06.2020-04.07.2020 Organized by Narula Institute of Technology.
- * Dr. Barnali Kundu attended AICTE Sponsored under AQIS 2019-2020 scheme Six days Online STTP on Recent Advances and Trends in Machine Learning: Theory and Application during 7th December to 12 December 2020 Organized by Department of Electrical Engineering, Asansol Engineering College, West Bengal.
- * Dr. Barnali Kundu attended 5 Days Faculty Development Programme on Python and IOT during 14.12.2020 -19.12. 2020 Organized by Dept. of Applied Electronics and Instrumentation Engineering, GNIT.
- * Dr. Barnali Kundu attended 3rd International Conference for Engineering Challenges in Gulf Countries 22nd January, 2021 Organized by Kuwait Chapter of The Institution of Engineers (India) & Institution of Engineers (India).
- * Dr. Barnali Kundu attended Webinar on PYTHON on 28th Nov, 2020 Organized by Dept. of Electrical Engineering, GNIT collaboration with Ardent Computech Pvt. Ltd.
- * Dr. Barnali Kundu attended Alumni Interaction on "How to make yourself ready to start your career in the Software Industry" on 21th Nov, 2020 Organized by Dept. of Electrical Engineering, GNIT.

- * Dr. Barnali Kundu attended online awareness programme on AICTE MODROB (Polytechnic) Scheme on 12th January, 2021 Organized by AICTE.
- * Dr. Barnali Kundu attended Webinar on “Battery Testing” on 19.05.2021 Organized by Dept. of Electrical Engineering, GNIT.
- * Dr. Barnali Kundu attended Online Industry Visit at UB on 22/05/21 Organized by Dept. of Electrical Engineering, GNIT.
- * Dr. Barnali Kundu attended National Conference on Emerging Trends in Engineering & Research (NCETER-2021) on 29.06.2021 Organized by JIS College of Engineering.
- * Dr. Debasree Saha attended One Week online Faculty Development Program on “PYTHON 3.4.3” during 8th June to 13th June 2020 Organized by Spoken Tutorial IIT, Bombay Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT), MHRD, Pragati Engineering College.
- * Dr. Debasree Saha attended Industry Webinar on Locomotive Computer based Interlocking System on 5th December 2020 Organized by Dept. of Electrical Engineering, GNIT.
- * Dr. Debasree Saha attended AICTE sponsored ONE WEEK STTP (Phase-I) on Recent Trends in Internet of Things (IoT) and Embedded systems Based Monitoring and Control of Distributed Systems during 10.08.2020 - 15.08.2020 Organized by Narula Institute of Technology.
- * Dr. Debasree Saha attended Online FDP on LaTeX during 29/6/2020 to 03/07/2020 Organized by SPOKEN Tutorial, IIT Bombay, Department of Information Technology, Mizoram University.
- * Dr. Debasree Saha attended One week online STTP under AICTE Quality Improvement Scheme (AQIS) on Recent Advances and Trends in Machine Learning: Theory and Application (Phase-2) during Jan 11-16, 2021 Organized by Department of Electrical Engineering, Asansol Engineering College, West Bengal.
- * Dr. Debasree Saha attended AICTE Training and Learning (ATAL) Academy

Online FDP on Power Electronics application in Machine Drives and Power system during 01.12.2020 – 05.12.2020 Organized by NIT Mizoram.

* Dr. Debasree Saha attended AICTE Training and Learning (ATAL) Academy Online FDP on Energy Engineering during 23.11.2020 – 27.11.2020 Organized by National Institute of Technology Agartala.

* Dr. Debasree Saha attended Phase-I of Short-Term Training Program on IoT & Advanced Power Electronics Applications in Smart Grid during 10th August to 14th August 2020 Organized by AICTE and the Department of Electrical Engineering, K. K. Wagh Institute of Engineering Education and Research, Nashik.

* Dr. Debasree Saha attended Webinar on Adaptive tracker for n-link rigid robotic manipulators via sliding mode control on 28th July, 2020 Organized by Dept. of Electrical Engineering, GNIT Dept. of Electrical Engineering, GNIT.

* Dr. Aveek Chattopadhyaya attended 5 Days Faculty Development Program on Technological Advancements in Electric Vehicle Applications during August 17th – 21st, 2020 Organized by Dept. of Electrical Engineering, GNIT.

* Dr. Aveek Chattopadhyaya attended International webinar on Design and Control Aspects of Induction Motor Drive with LC Filter Applications during 22nd August, 2020 Organized by Department of Electrical Engineering, GMIT.

* Dr. Aveek Chattopadhyaya attended Five (5) Days Online Faculty Development Program on “Smart Practices towards Tomorrow’s Electric Power Paradigm” during 25th – 29th May 2021 Organized by Gargi Memorial Institute of Technology, Technically Sponsored by IEEE -PES, Kolkata Section.

* Dr. Aveek Chattopadhyaya attended Five Days Online National Faculty Development Program on “Implementation of Machine Intelligence towards Digital India” during 22nd June 26th June 2020 Organized by Department of Electronics and Communication Engineering, Guru Nanak Institute of Technology, Kolkata.

* Mr. Susovan Dutta attended 5 Days Faculty Development Program on Technological Advancements in Electric Vehicle Applications during August 17th – 21st, 2020 Orga-

nized by Dept. of Electrical Engineering, GNIT.

- * Mr. Susovan Dutta attended AICTE Sponsored STTP on Digital Energy Network: IoT Applications in Smart Grid Systems during 8-13 Feb, 2021 Organized by JISCE.
- * Mr. Susovan Dutta attended Workshop on Expert session on Electric Vehicle on 11th Feb, 2021 Organized by Mathworks & EE, GNIT.

- * Mr. Susovan Dutta attended Workshop on Expert session on Expert Session on Battery Modeling on 12th Feb, 2021 Organized by Mathworks & EE, GNIT.

- * Mr. Susovan Dutta attended One week faculty development program on Research and Technical Challenges in Energy and Power System (RTCEPS 2020) during 29.06.2020-04.07.2020 Organized by Narula Institute of Technology.

- * Ms. Rikta Majumder attended 5 Days Faculty Development Program on Technological Advancements in Electric Vehicle Applications during August 17th – 21st, 2020 Organized by Dept. of Electrical Engineering, GNIT.

- * Ms. Rikta Majumder attended One Week online STTP Sponsored by AICTE, New Delhi under AICTE Quality Improvement Schemes (AQIS) on Recent Advances and Trends in Machine Learning: Theory and Application during December 7-12, 2020.

- * Ms. Rikta Majumder attended AICTE Training and Learning (ATAL) Academy Online FDP on Robotics- An Application in Medical Science during 01.12.2020 – 05.12.2020 Organized by Maulana Azad National Institute of Technology, Bhopal.

- * Ms. Rikta Majumder attended One week FDP on Python and IOT during 14th-18th Dec., 2020 Organized by AEIE and CA Dept, GNIT.

- * Ms. Rikta Majumder attended AICTE Sponsored STTP on Catch young minds early-teachers training on orientation programme for new entrants during 14th june to 19th june 2021 Organized by JISCE.

- * Ms. Rikta Majumder attended Webinar on Way to start entrepreneurship journey &

find VC Funding Opportunity for Early Stage Entrepreneurs during June 2021 Organized by JISCE.

* Ms. Rikta Majumder attended AICTE Training and Learning (ATAL) Academy Online FDP on Distributed Energy System Modelling and Control during 21st-25th June 2021 Organized by GEC BHARUCH.

* Ms. Rikta Majumder attended Five Days Faculty Development Programme on "Smart Practices towards Tomorrow's Electric Power Paradigm" during 25th to 29th May 2021 Organized by GMIT.

* Ms. Rikta Majumder attended National Level Webinar on Systematic Literature Review Research Methodology during 25th Jan 2021 Organized by Tripura University.

* Ms. Madhumita Chakraborty attended 5 Days Faculty Development Program on Technological Advancements in Electric Vehicle Applications during August 17th – 21st, 2020 Organized by Dept. of Electrical Engineering, GNIT.

* Ms. Madhumita Chakraborty attended Workshop on Entrepreneurship on 9th December 2020 by Mr. Subhashis Dutt, Director, Mohendra Dutt & Sons.

* Ms. Madhumita Chakraborty attended AICTE Sponsored under AQIS 2019-2020 scheme six days Online Short Term Training Programme (STTP) on Recent Advances and Trends in Machine Learning: Theory and Application during 7th December to 12th December 2020.

* Ms. Madhumita Chakraborty attended 3rd International Conference for Engineering Challenges in Gulf Countries on Jan 22, 2021 03:30 PM Kuwait (Time Zone) Organized by Kuwait Chapter of The Institution of Engineers.

* Ms. Madhumita Chakraborty attended AICTE-AQIS Sponsored Short Term Training Program (STTP-II) on Green IoT for Green Environment during 10.05.2021 - 15.05.2021 Organized by Department of Applied Electronics and Instrumentation Engineering, Gurunanak Institute of Technology, JIS Group.

* Ms. Madhumita Chakraborty attended National Conference on Emerging Trends in Engineering & Research (NCETER-2021) on 29.06.2021 Organized by JIS Col-

lege of Engineering.

- * Ms. Madhumita Chakraborty attended AICTE Training and Learning (ATAL) Academy Online FDP on Research Avenues and Challenges in Industry 4.0 during 14.06.2021-18.06.2021 Organized by RMD Engg. College Tamil Nadu.
- * Ms. Madhumita Chakraborty attended AICTE Sponsored STTP on Risk & Reliability Based Asset Management during 21.06.2021-26.06.2021 Organized by JIS College of Engineering.
- * Ms. Madhumita Chakraborty attended Webinar on Way to start entrepreneurship journey & find VC Funding Opportunity for Early Stage Entrepreneurs during June 2021 Organized by JISCE.
- * Ms. Madhumita Chakraborty attended 2 Days Workshop on Data Science during 26-27 June 2021 Organized by Centre for Data Science (CDS), JIS Institute of Advanced Studies and Research (JISIASR), JIS University.
 - * Mr. Shyamal Kr. Roy attended One week faculty development program on Research and Technical Challenges in Energy and Power System (RTCEPS 2020) during 29.06.2020-04.07.2020 Organized by Narula Institute of Technology.
 - * Mr. Shyamal Kr. Roy attended Webinar on “Battery Testing” on 19.05.2021 Organized by Dept. of Electrical Engineering, GNIT.
 - * Mr. Shyamal Kr. Roy attended AICTE-ISTE Sponsored 6 Days Online Induction program on “Advances in Renewable Energy Technologies: Opportunities and Challenges (Phase-I) during 2nd to 8th March, 2021 Organized by Dept. of EE, JIET, Jodhpur.
 - * Mr. Shyamal Kr. Roy attended Webinar on Impact on Solar Technology on Renewable energy Sector on 06th Feb, 2021 Organized by Dept. of Electrical Engineering, GNIT.
 - * Mr. Shyamal Kr. Roy attended Expert Session on Impact on Electric Vehicle during 11th-12th Feb, 2021 Organized by Dept. of Electrical Engineering, GNIT.
 - * Mr. Shyamal Kr. Roy attended Six days Online Induction Program on Advances in Renewable Energy Technologies Phase II during 6th to 12th May, 2021 Organized by Jodhpur Institute of Engineering and Technology, Jodhpur.
 - * Mr. Shyamal Kr. Roy attended five days Faculty Development Program AICTE Sponsored Short Term Training Program on Digital Energy Network: IoT Applications in Smart Grid Systems during 16th -21st June, 2021 Organized by JIS College of Engineering.

- * Mr. Shyamal Kr. Roy attended AICTE Training and Learning (ATAL) Academy Online Elementary FDP on Recent Trends in Electric Vehicle and Renewable Energy Systems during 21st - 25th June, 2021 organized by Arasu Engineering College.
- * Mr. Shyamal Kr. Roy attended AICTE Training and Learning (ATAL) Academy Online Elementary FDP on Global Warming & Impacts of Power Electronics towards Green Technology during 24th - 28th May, 2021 organized by SRM Valliammai Engineering College.
- * Mr. Suman Ghosh attended One week faculty development program on Research and Technical Challenges in Energy and Power System (RTCEPS 2020) during 29.06.2020-04.07.2020 Organized by Narula Institute of Technology.
- * Mr. Suman Ghosh attended AICTE Training and Learning (ATAL) Academy Online FDP on Smart Grids and Electric Vehicles during 25th-29th August, 2020.
- * Mr. Suman Ghosh attended AICTE sponsored one week short term training program on Recent Trends in Internet of Things (IoT) and embedded systems Based Monitoring and Control of Distributed Systems during 10th to 15th August, 2020.
- * Mr. Suman Ghosh attended One Week Faculty Development Programme on Sustainable Technology - Innovation and Foundation for Future (STIFF-2020) during 12th August to 16th August, 2020.
- * Mr. Suman Ghosh attended One-Week International Research Orientation Programme during 26th October, 2020 to 31st October, 2020 Organized by M.M. Institute of Computer Technology & Business Management, MM (DU), Mullana, Ambala in association with Elsevier.
- * Mr. Suman Ghosh attended AICTE-AQIS Sponsored Short Term Training Program (STTP-II) on Green IoT for Green Environment during 10.05.2021 - 15.05.2021 Organized by Department of Applied Electronics and Instrumentation Engineering, Gurunak Institute of Technology, JIS Group.
- * Mr. Suman Ghosh attended AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "FDP on Internet of Things" during 07.06.2021 - 11.06.2021 Organized by Electronics Service and Training Centre.
- * Mr. Suman Ghosh attended 5 Days Faculty Development Program on Technological Advancements in Electric Vehicle Applications during August 17th - 21st, 2020 Organized by Dept. of Electrical Engineering, GNIT.
- * Mr. Suman Ghosh attended National Conference on Emerging Trends in Engi-

neering & Research (NCETER-2021) on 29.06.2021 Organized by JIS College of Engineering.

- * Mr. Suman Ghosh presented paper at International Conference on Artificial Intelligence and Smart Systems (ICAIS 2021) during 25.03.2021 - 27.03.2021 Organized by JCT College of Engineering and Technology, Coimbatore, India.
- * Mr. Suman Ghosh presented paper at Fourth IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT 2021) on 15.09.2021 Organized by Velalar College of Engineering and Technology, Thindal, Erode, Tamil Nadu, India.
- * Mr. Pritam Chowdhury attended Workshop on Expert session on Electric Vehicle on 11th Feb, 2021 Organized by Mathworks & EE, GNIT.
- * Mr. Pritam Chowdhury attended Workshop on Expert session on Expert Session on Battery Modeling on 12th Feb, 2021 Organized by Mathworks & EE, GNIT.
- * Mr. Pritam Chowdhury attended Expect Session on Impact on Electric Vehicle during 11th-12th Feb, 2021 Organized by Dept. of Electrical Engineering, GNIT.
- * Mr. Pritam Chowdhury attended AICTE sponsored ONE WEEK STTP (Phase-I) on Recent Trends in Internet of Things (IoT) and Embedded systems Based Monitoring and Control of Distributed Systems during 10.08.2020 - 15.08.2020 Organized by Narula Institute of Technology.
- * Mr. Pritam Chowdhury attended 5 Days Faculty Development Program on Technological Advancements in Electric Vehicle Applications during August 17th - 21st, 2020 Organized by Dept. of Electrical Engineering, GNIT.
- * Mr. Amit Debnath attended Workshop on Expert session on Electric Vehicle on 11th Feb, 2021 Organized by Mathworks & EE, GNIT.
- * Mr. Amit Debnath attended Workshop on Expert session on Expert Session on Battery Modeling on 12th Feb, 2021 Organized by Mathworks & EE, GNIT.
- * Mr. Amit Debnath attended Expect Session on Impact on Electric Vehicle during 11th-12th Feb, 2021 Organized by Dept. of Electrical Engineering, GNIT.
- * Mr. Amit Debnath attended AICTE sponsored ONE WEEK STTP (Phase-I) on Recent Trends in Internet of Things (IoT) and Embedded systems Based Monitoring and Control of Distributed Systems during 10.08.2020 - 15.08.2020 Organized by Narula Institute of Technology.
- * Mr. Amit Debnath attended AICTE Training and Learning (ATAL) Academy Online

Elementary FDP on Fuel Cell Technology [FCT-2021] during 21.06.2021-25.06.2021 Organized by AICTE Training and Learning (ATAL) Academy.

* Mr. Amit Debnath attended 5 Days Faculty Development Program on Technological Advancements in Electric Vehicle Applications during August 17th – 21st, 2020 Organized by Dept. of Electrical Engineering, GNIT.

* Ms. Priyanka Dutta attended 5 Days Faculty Development Program on Technological Advancements in Electric Vehicle Applications during August 17th – 21st, 2020 Organized by Dept. of Electrical Engineering, GNIT.

* Ms. Priyanka Dutta attended 3 days FDP on Power Electronics Converters: Applications and Their Control during August 10th - 12th August, 2020 Organized by Electrical Engg Department Geetanjali Institute of Technical Studies Udaipur (Raj.).

* Ms. Priyanka Dutta attended Webinar on Diving into deep learning during 28th - 29th July, 2020 Organized by IET JU ON Campus.

* Ms. Priyanka Dutta attended Webinar on Recent Advances in Science during 6th - 7th July, 2020 Organized by Govt. Serchhip College.

* Ms. Priyanka Dutta attended One week faculty development program on Research and Technical Challenges in Energy and Power System (RTCEPS 2020) during 29.06.2020-04.07.2020 Organized by Narula Institute of Technology.

* Ms. Priyanka Dutta attended Webinar on Advancements in industrial Electrical Installation Process on 17th June Organized by Dept of Electrical Engg Mizoram University, Aizawl.

* Ms. Subhra Sen attended Short Term Training Programme through ICT Mode on LABVIEW AND MATLAB application in Electrical and Electronics Engineering during 25.1.2021-29.1.2021 Organized by NITTTR.

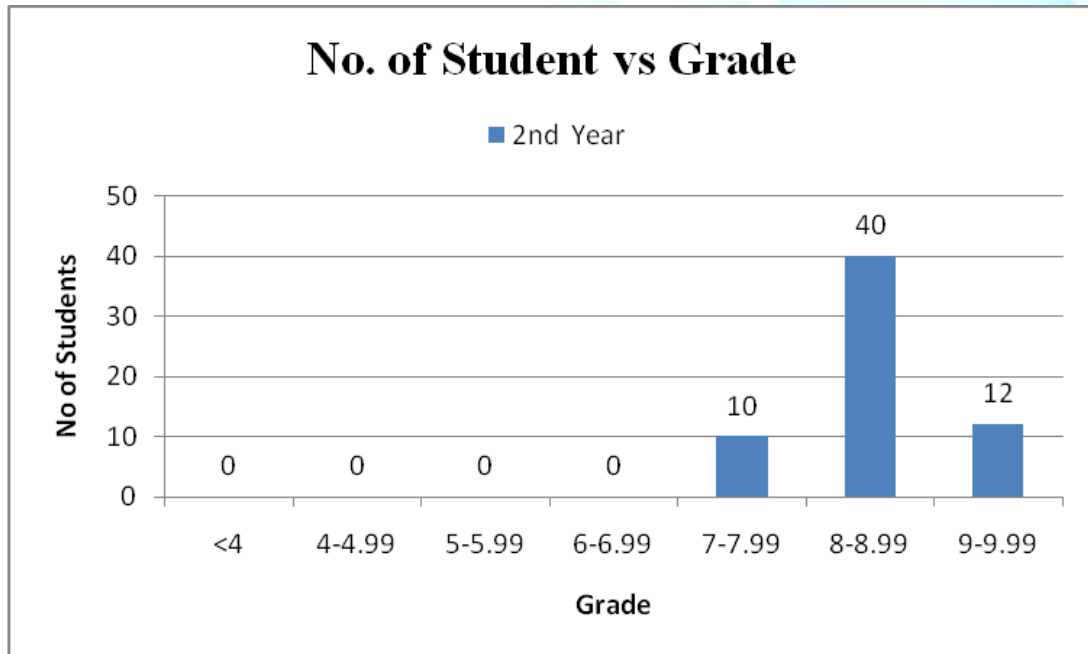
* Mr. Vivekananda Kumar attended Short Term Training Programme through ICT Mode on LABVIEW AND MATLAB application in Electrical and Electronics Engineering during 25.1.2021-29.1.2021 Organized by NITTTR.

* Mr. Arnab Kumar Roy attended Short Term Training Programme through ICT Mode on LABVIEW AND MATLAB application in Electrical and Electronics Engineering during 25.1.2021-29.1.2021 Organized by NITTTR.

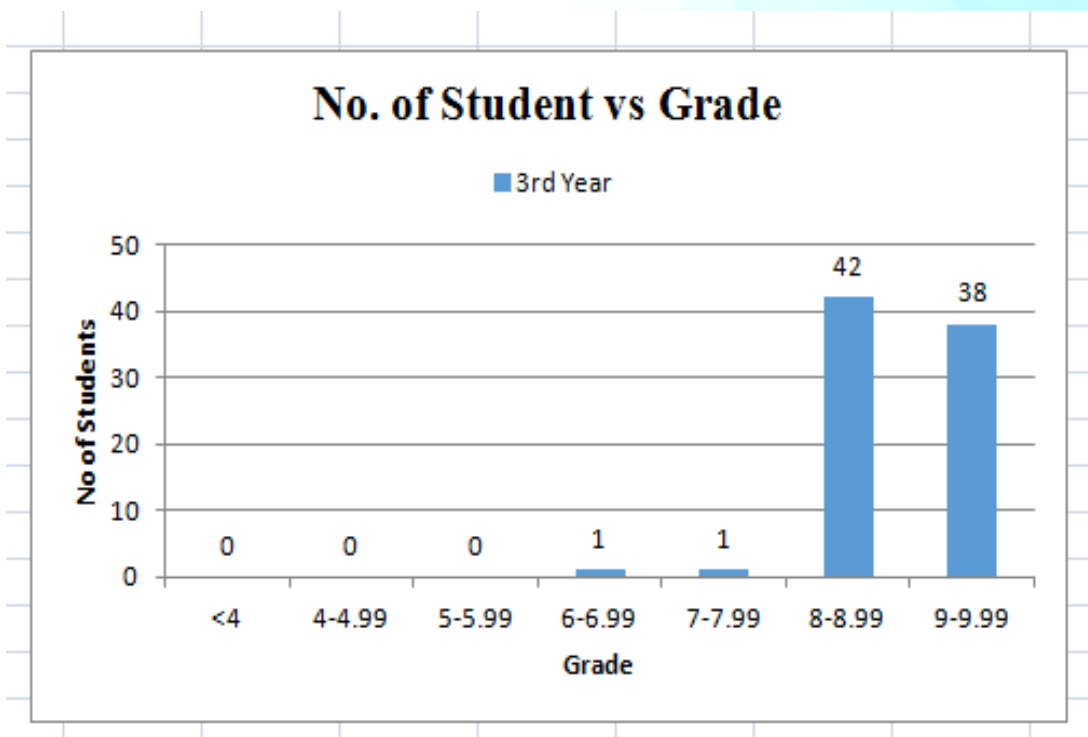
* Mr. Bapi Tarafder attended Short Term Training Programme through ICT Mode on LABVIEW AND MATLAB application in Electrical and Electronics Engineering during 25.1.2021-29.1.2021 Organized by NITTTR.

SGPA WISE RESULT ANALYSIS (EE) AY 2020-2021

SGPA-wise Result Analysis (EE 2ND YEAR)

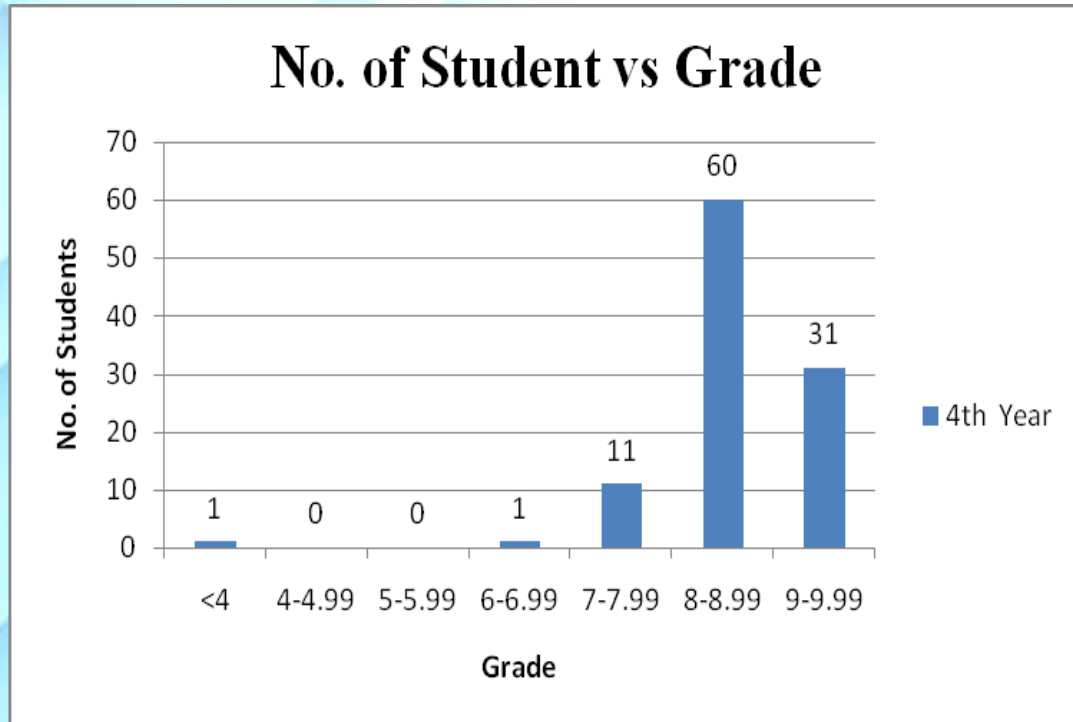


SGPA-wise Result Analysis (EE 3RD YEAR)



Result Analysis

SGPA-wise Result Analysis (EE 4TH YEAR)



GURU NANAK INSTITUTE OF TECHNOLOGY

Department
of
Information Technology

ANNUAL REPORT

2020-21

Department of Information Technology

Name of the Department: Information Technology

Vision of the department

The vision of the Information Technology is to make leaders in Information Technology education in support of teaching and learning, and also to be the preferred source of quality technology education, research and community services delivery for the local, national and international levels.

Mission of the department

- * To build a quality and cutting edge technology infrastructure.
- * Deliver quality, prompt and reliable technology education services.
- * Establish and maintain an effective academic environment for students.
- * Engage in emerging research areas and establishing leadership.
- * Contribute to the community services at large as well as catering to socio-economic goals in local and national levels.

PEO

To prepare students to excel in graduate school or technical careers through a world-class, rigorous and competitive program in the field of Information Technology.

To train students across the spectrum of basic and applied science, recognizing and exploiting common descriptions in disparate systems.

To train students with sufficient scientific and Information Technology breadth to design and create novel solutions to real-life problems in computing domain.

To develop students professional and ethical attitudes, effective communication and teamwork skills, and an ability to place science and computational issues and solutions within the broader societal context.

To provide students with an academic environment committed to excellence and innovation that contributes for developing role ready individual with leadership, professionalism, and life-long learning for professional careers in the field of Information Technology

Program Outcomes

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

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

Programme Specific Outcomes (PSOs)

PSO1-Graduates will be able to apply basic engineering knowledge to understand and analyze basic-complex problems in the field of Information Technology.

PSO2-Graduates will be able to provide optimized solutions for organizations and individuals through Information Technology specific skills.

PSO3-Graduates will be able to work in a group to manage projects and human resources in the field of Information Technology.

PSO4-Graduates will be able to contribute in the research and development field of Information Technology through the lifelong learning to serve the society and nation.

Brief overview of the department

The Dept. of Information Technology, at the Guru Nanak Institute of Technology, Kolkata came into existence in the year 2007 for the benefit of Engineering, Science and Technology and the Nation on a larger scale. The department is renowned for its quality education, placement, discipline and very good learning environment for the students. Since its inception the department has been recognized for excellent in research and teaching. The department has a thriving research environment with active with active research groups in the areas of Artificial Intelligence, Bioinformatics, Complex and Social Networks, Data and Web Mining, and software Engineering. Graduates from the department are heavily recruited by both academia and industry, and ex-students of the department occupy top positions in both academia and industry all over the world.

Department of Information Technology

We are proud of the success of our student alumni over years in industries like Infosys, TCS, Cognizant, TechMahindra, Wipro, Data 64, Tally, HCL Technology, Accenture, and many more. A handful percentage of students have gone for higher studies in reputed the institutes of India and abroad. Careers in IT are well paying and in high demand, hence our students face competition from engineering students of other branches and have to show their creativity and passion for IT. The aim of our accredited four year B.Tech. programme is to enable students to acquire specialized scientific knowledge, as well as to provide a basis for their personal, social and cognitive development.

The future outlook for Information Technology students is indeed a bright one. Most students that come out of Information Technology dept. have a job already lined up for them when they graduate, because there is a high demand for Information Technology specialists, and not nearly enough people to fill the positions available at the time. There are bright career prospects for information technology professionals or software professionals in recent scenario. With the opening of huge software and IT companies in India, the demand for trained professionals have increased considerably. India is known to be a leader in software and IT sector. Information

HOD Message

It gives me immense pleasure to present brief report of Department of Information of Technology. The Dept. of Information Technology, at the Guru Nanak Institute of Technology, Kolkata came into existence in the year 2007 for the benefit of Engineering, Science and Technology and the Nation on a larger scale. Since its inception, the department of Information Technology has welcomed scholars and enrolled students whose inclination towards creative

inquiry changes how we interact with and understand the world. No matter what the technology, our students and faculty are committed to a passionate pursuit of knowledge. The department has a team of highly experienced and motivated faculty members who are in process of tuning the young minds to make them globally competitive. The strength of the department is highly motivated students who understand the dynamics of the industry and upgrade their skills accordingly. The scope of Information Technology is endless. The students of the Information Technology are highly demanded by the recruiters of the top companies. Depending upon the interest of the student, he/she may choose to go for higher studies or if employed can choose to do research, development, testing or management in the Information Technology industry. In our department we not only give emphasis on study but also apply our knowledge in understanding what computers. We organized various seminars/workshops/industry visits regularly to make familiar students with recent trend in IT Industry.

Among the reasons why our graduates are such favorites of industry is the consistent hands-on experience-based approach of our curriculum, our excellent laboratories, the long-time connections between Department and the industry. Whether you are a student, parent, prospective faculty member or a curious member of the public, I invite you to become part of the GNIT-IT family. We hope you will also have the opportunity to visit us in our state-of-the-art facilities.

Sincerely
Mr. Sudeep Ghosh,
HOD
Department of IT

Departmental achievements

Student's achievements

- * Sayantani Mondal, Shalini Roy, 2020 pass out Got JIS Samman in the Highest DGPA Owner Category from department.
- * Soumyadipta Basu, 3rd Year, Silvia Das, 3rd Year, Subhojit Dey, 3rd Year, Madhurima Pan, 4th Year Got JIS Samman Award for highest number of publication in departmental level for the year 2020.
- * Suchandra Bhattacharya, 1st Year, Winner of JIS SPIRIT in Recitation (solo) category.
- * Cheryl Mukherjee, 2nd year Winner of JIS SPIRIT in Sutradhar/Anchor category.
- * Anubhav Roy, 1st Year, 1st Runner up of JIS SPIRIT in Wings of imagination category.
- * Debayan Roy, 3rd Year, 2nd Runner up of JIS SPIRIT in IN-QUIZ-ITIVE category.



- * Cheryl Mukherjee, 2ND year IT, Represented as Delegate of Ireland in IMUN 28.0 on the board delegation concerning to Education of Indigenous People on 24th-25th October, 2020
- * Cheryl Mukherjee, 2ND year IT, Has become the Winner of SAMATVA 2020 held 16th-18th October, organised by Department of EE, GNIT

Departmental achievements

Student's achievements

- * Subham Gupta, 2ND year IT, become Campus Ambassador in E-Cell IIT Kharagpur, on 28th October, 2020
- * Cheryl Mukherjee, 2ND year IT, Publication of paper presented at National Conference on Science, Technology and Communication Skills (NCSTCS 2020) organised by Department of Basic Science and Humanities, Narual Institute of Technology on 25th-26th September 2020
- * Rachita Bhadra, 4th year, IT, has become the Winner of Cine Short category in FELICIFIC v1.0, organized by GNIT media Team
- * Prithwish das, 4th year, IT, has received DIRECT APPRENTICE OFFER AWARD from GlobSyn Business School for completion of Best Project.



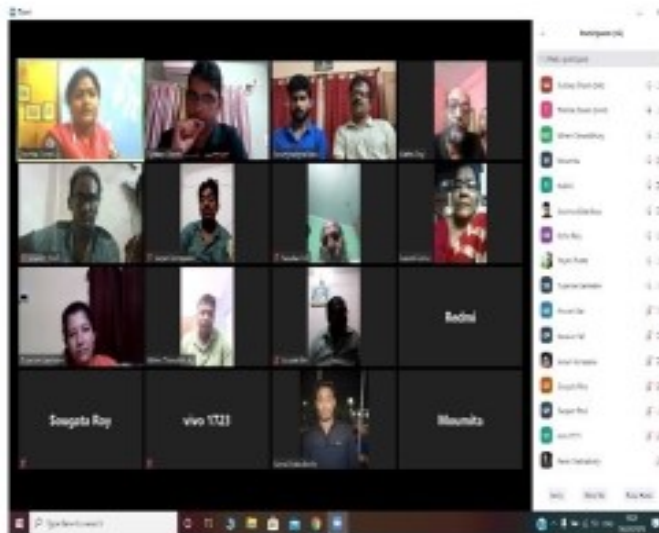
- * Monishankar Nath, 4th year, IT, has been selected for the International Research Paper Awards 2020 for the excellence in, "Hybrid routing protocol in Vehicular Ad-hoc Network".
- * Debayan Roy, 3rd Year, 2nd Runner up of JIS SPIRIT in IN-QUIZ-ITIVE category.

Department of Information Technology

- * Soumyadipta basu, 4th year, IT, has received Microsoft Learn Trophy: Azure Fundamentals: Core Azure Concepts on 10/05/2021.
- * Soumyadipta Basu, 4th year, IT, has received Microsoft Badge: Train User on new Windows and Microsoft 365 Apps Features on 10/05/2021.
- * Astha Ghosh, 3RD year, IT, has received Microsoft Learn Trophy (Azure developer League): Getting started with artificial intelligence on Azure on 15/09/2021.
- * Astha Ghosh, 3RD year, IT, has received Microsoft badge: Introduction to Azure fundamentals on 07/05/2021.
- * Subhasis Dey , 3RD year, IT, has been nominated as HackerEarth CAMPUS Evangelist on 25/05/2021.
- * Soumyadipta Basu , 4th year, IT, has been invited as judge for the event



**Banner of Tech Rapida
Departmental Tech fest**



Online Parent Teacher Meet

“CYBERMATIC” of the fest in Relativity-2021 of La Martiniere for Boys which is scheduled to be held on 26th November, 2021.

- * Cheryl Mukherjee, 2ND year IT, Represented as Delegate of Ireland in IMUN 28.0 on the board delegation concerning to Education of Indigenous People. On 24th-25th October, 2020, organized by United nation.

Department of Information Technology

* Subham Gupta, 2ND year IT, Campus Ambassador in E-Cell IIT Kharagpur on 28th October, 2020, organized by IIT-Kgp.

* First year student Boot Camp on Cyber Security on 20th February, 2021, organized by GNIT Cyber Security Club.

* Cheryl Mukherjee, 2ND year IT, International Model United Nations as a Delegate representing Belgium on 4th and 5th July, 2020, for the Social and Humanitarian Conference on the protection and betterment of LGBTQ+ rights on Now a representative of GNIT official MUN Board, on 12/04/2020, , organized by International Model United Nations.

* Rachita Bhadra, was Winner of Cine Short category in FELICIFIC, held on July, 2020.

* Sreetama saha, 3rd Year IT, Participation in the Yoga Program (3hrs. Online Mode) on 03.07.2021 organized by Yoga Certification Board

* Sreetama saha, , 3rd Year IT, International Day of Yoga (2021) Quiz, organized by Ministry of AYUSH & MyGov on 6/29/2021.

* Sreetama Saha, 3rd year IT, National Level Quiz on Python Programming', , organized by Sigma Institute of Engineering, Vadodara, Gujarat on 24.07.2021.

* Aniket Nayek, Prince Kumar, Ankur Singh, , published Development of Solar Car organized by GNIT in collaboration with IE Conclave, October, 2021.

* Soumyadipta Basu published article Lecture Notes in Electrical Engineering (Book Chapter) August, 2021.

* Raunak Seal published First Eastern Regional Conclave of Student's Chapters of the Institutions of Engineers(India) October, 2021.



- * Debayan Roy, Sriparna Ghosh, Gourav Nandy, Sayani Sengupta, Roumita Singha, Pallab Nath published First Eastern Regional Conclave of Student's Chapters of the Institutions of Engineers(India) October, 2021.
- * Katha Roy, Jagyaseni Sengupta, Ishan Goswami, published article First Eastern Regional Conclave of Student's Chapters of the Institutions of Engineers (India) October, 2021.
- * Sumit Choudhary, Subhra Sarkar, published article on Studies in Autonomic, Data-driven and Industrial Computing. Springer (Book Series) October, 2021
- * Raka Basu, Samarpitha Das, Aditya Manna published article First Eastern Regional Conclave of Student's Chapters of the Institutions of Engineers (India) October, 2021.
- * Arkajyoti Chakraborty published book chapter Studies in Autonomic, Data-driven and Industrial Computing, August 2021.

Faculties' achievements

- * Ms. Suparna Karmakar, has successfully completed Faculty Enablement Program on "Database Management System through INFYTQ Platform" conducted in online mode using WebEx platform from 22nd July to 24th July 2020 by Infosys Limited and has been awarded with "A+" Grade.
- * Mr. Sudeep Ghosh, Act as session moderator at "International online conference on Engineering Response to COVID-19,2020" Organized by JISE on 8th & 9th October, 2020.
- * Mr. Sudeep Ghosh, Act as reviewer of an international conference "International Conference on Machine Intelligence and Data Science Applications" University of Petroleum and Energy Studies , Dehradun, India, July ,2020
- * Mr. Sudeep Ghosh, Act as reviewer of IEM-ICDC2020 (International Conference on Computational Intelligence, Data Science and Cloud Computing)
- * Mr. Tridib Chakraborty, Act as reviewer of IEM-ICDC2020 (International Con-

ference on Computational Intelligence, Data Science and Cloud Computing)

- * Ms. Suparna Karmakar, Got the NPTEL mentorship certificate. Subject: The Joy of computing using Python.
- * Mr. Sudeep Ghosh, Got the NPTEL mentorship certificate. Subject: Programming using in Java.
- * Mr. Tridib Chakraborty, Got the NPTEL mentorship certificate. Subject: The Joy of computing using Python.
- * Mr. Tridib Chakraborty, Act as reviewer of IEM-ICDC 2021 (International Conference on Computational Intelligence, Data Science and Cloud Computing).
- * Mr. Chowdhury MD Mizan. Act as reviewer of IEM-ICDC 2021 (International Conference on Computational Intelligence, Data Science and Cloud Computing).
- * Ms. Trishita Ghosh, Act as reviewer of International Conference on Advanced Computing 2021
- * Ms. Trishita Ghosh, Act as reviewer of 34th IEEE International Symposium on Computer-Based Medical Systems.
- * Ms. Trishita Ghosh , Act as reviewer of IEEE Transactions on Systems, Man and Cybernetics: Systems.
- * Dr. Moumita Das, Green ThinkerZ Awards 2020-Top 50 International Distinguished Teachers 2020.
- * Dr. Moumita Das, resource person as Innovtion Ambassador on Entrepre-

neurship and Innovation: Vectors for Successful Fundraising on 23rd December, 2021

- * Mr. Sudeep Ghosh Act as reviewer of IEM-ICDC 2021 (International Conference on Computational Intelligence, Data Science and Cloud Computing)

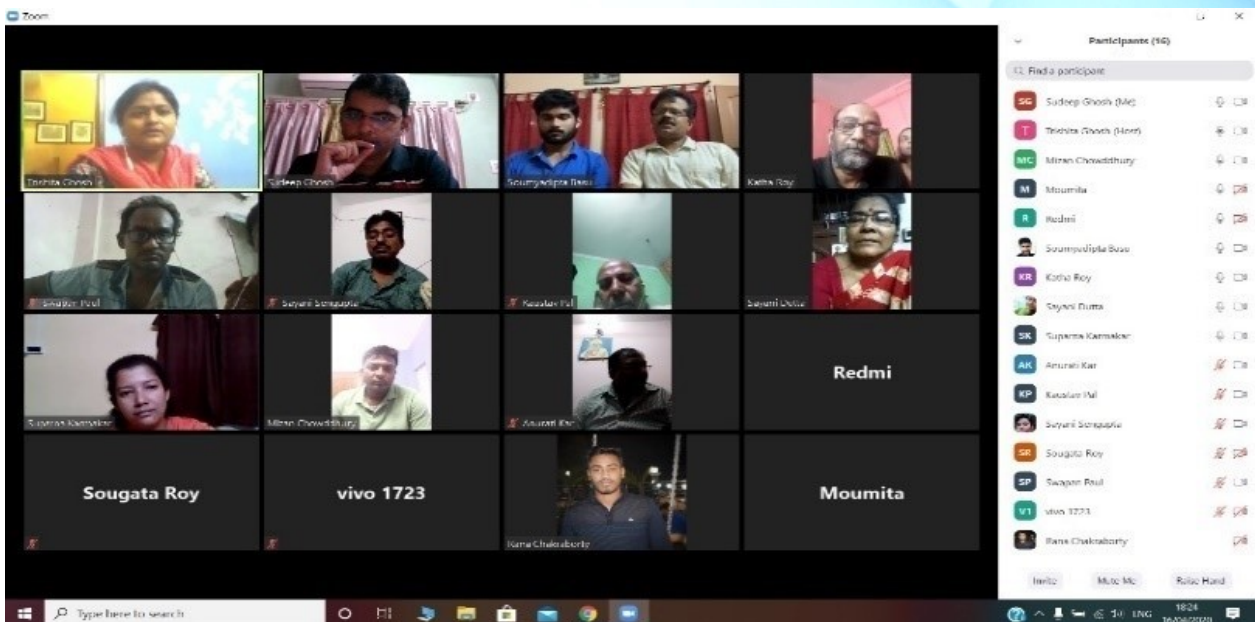
Act as reviewer of IEM-ICDC 2021 (International Conference on Computational Intelligence, Data Science and Cloud Computing).

Departmental Events Organized

- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized One day Online Workshop on Android on 13/03/2021 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android. Mr. Amar Banerjee was speaker from Technical head OGMA TechLab.
- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized API integration in Web Development using PHP including React & Angular JS on 20/03/2021 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android. Mr. Sampriti Sarkar was speaker from Corporate trainer & Web Developer, Techtree Technology.
- * Dr. Moumita Das, Assistant Professor of IT Dept, organized Interactive Session/Mentoring Session with "Successful Start-up founders" (Entrepreneurs in Campus) on 30/03/2021 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android. Mr. Amar Banerjee was speaker from Technical head OGMA TechLab.
- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized

Android App Development from 17/08/2020 to 22/08/2020 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android. Mr. Samprit Sarkar was speaker from Corporate trainer & Web Developer, Techtree Technology.

- *
- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized Embedded System design with Arduino from 17/08/2020 to 22/08/2020 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android.



- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized Ethical Hackinh on 12/09/2020 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android.
- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized Cross platform motile apps Development on 19/09/2020 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android.

- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized Cross Android Apps Developments on 26/09/2020 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android.
- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized Selenium: Health Benefits and Risk on 10/08/2020 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android.
- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized Using Cognitive Modeling to Boost Cyber security Skills Development on 10/11/2020 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android.

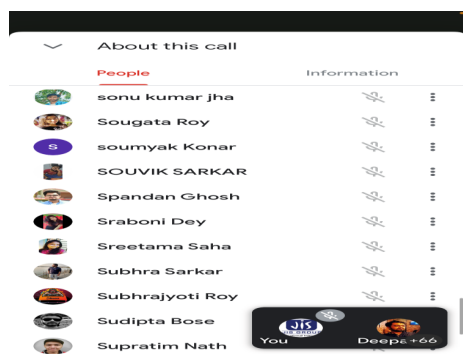
- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized Interaction with 1st year student of CST & IT on 21/11/2020



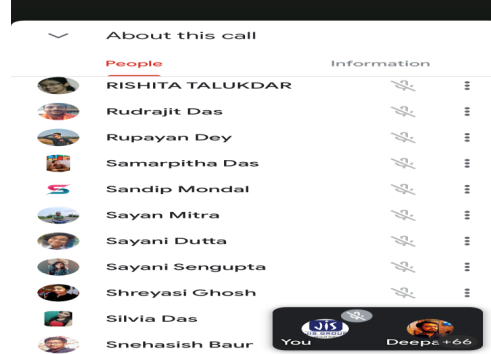
- for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android.
- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized (Industry Mentor meet for 1st year students) on 21/11/2020 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android.

- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized (Industry Mentor meet for 1st year students) on 01/08/2020 for 2nd & 3rd year IT students to promote the young minds with emerging ideas of Android.
- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized Virtual Industry Visit Webskitters technology solutions Pvt LTD on 06/03/2021.
- * Dr. Moumita Das, Assistant Professor, dept. of IT, organized IIC boot camp on Lean start up & Minimum Vaible Product / Business on 29/05/2021.
- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized one week Industrial Training on Tips and Tricks of C Programming on 29/05/2021.
- * Mr. Md Mizan Chowdhury, Assistant Professor of IT Dept, organized one week Workshop on Python Programming on 30/03/2021.
- * . Md Mizan Chowdhury, Assistant Professor of IT Dept, organized one week Workshop on Python Programming Language on 19/07/2021.

Virtual industry Visit



Virtual Industry Visit



Online Covid Awareness Programme

Faculties' participation

Mr. Sudeep Ghosh, Assistant Professor, dept. of IT attended FDP on “Artificial Intelligence using Python” organized by Government College of Engineering and Ceramic Technology, Kolkata, from 14/09/2020 to 19/09/2020.

Mr. Sudeep Ghosh, Assistant Professor, dept. of IT attended FDP on Need of mathematical cryptology and digital forensic in current society, organized by Presidency University, Kolkata on 20/07/2020.

Mr. Sudeep Ghosh, Assistant Professor, dept. of IT attended FDP Webinar on “Data Science and Applications: Present and Future”, on 30/06/2020.

Mr. Sudeep Ghosh, Assistant Professor, dept. of IT attended FDP on “Artificial Intelligence and machine learning in Healthcare” BIT, Mesra , from 27/07/2020 to 31/07/2020.

Ms. Suparna Karmakar, Assistant Professor, dept. of IT attended eSIP from 08/11/2020 to 20/11/2020.

Ms. Suparna Karmakar, Assistant Professor, dept. of IT attended Faculty Development Program on “Technological Advancement in Electric Vehicles from 17/08/2020 to 21/08/2020.

Mr. Chowdhury Md. Mizan, Assistant Professor, dept. of IT attended Faculty Development Program on “Technological Advancement in Electric Vehicles from 17/08/2020 to 21/08/2020.

Mr. Tridib Chakraborty, Assistant Professor, dept. of IT attended Faculty Development Program on “Technological Advancement in Electric Vehicles from 17/08/2020 to 21/08/2020.

Mr. Sudeep Ghosh, Assistant Professor, dept. of IT attended Faculty Development Program on “Technological Advancement in Electric Vehicles from 17/08/2020 to 21/08/2020.

Ms. Suparna Karmakar, Assistant Professor, dept. of IT attended Online FACULTY DEVELOPMENT PROGRAM on Electronic Devices, Image Processing and Machine Learning from 11/08/2020 to 15/08/2020.

Mr. Sudeep Ghosh, Assistant Professor, dept. of IT attended Online FACULTY DEVELOPMENT PROGRAM on Electronic Devices, Image Processing and Machine Learning from 11/08/2020 to 15/08/2020.

Mr. Tridib Chakraborty, Assistant Professor, dept. of IT attended Online FACULTY DEVELOPMENT PROGRAM on Electronic Devices, Image Processing and Machine Learning from 11/08/2020 to 15/08/2020.

Mr. Chowdhury Md. Mizan, Assistant Professor, dept. of IT attended Online FACULTY DEVELOPMENT PROGRAM on Electronic Devices, Image Processing and Machine Learning from 11/08/2020 to 15/08/2020.

Mr. Tridib Chakraborty, Assistant Professor, dept. of IT attended FDP on "Machine Learning and its Application" from 21/06/2021 to 25/06/2020.

Mr. Tridib Chakraborty, Assistant Professor, dept. of IT attended FDP on "Cyber Security" from 07/06/2021 to 11/06/2020.

Ms. Suparna Karmakar, Assistant Professor, dept. of IT attended ATAL FDP on "Artificial Intelligence and Machine Learning using Python" from 21/06/2021 to 25/06/2021.

Ms. Suparna Karmakar, Assistant Professor, dept. of IT attended ATAL FDP on "Mathematical Modeling and Simulation of Dynamic Systems related to Cyber Defense" from 07/06/2021 to 11/06/2021.

Dr. Moumita Das, Assistant Professor, Dept. of IT, attended Online Faculty Development Programme on Advanced Optimization Techniques and hands-on with MATLAB/SCILAB from 06/09/2021 to 17/09/2021.

Dr. Moumita Das, Assistant Professor, Dept. of IT, attended FDP on "Machine Learning and its Application" from 21/06/2021 to 25/06/2021.

Dr. Moumita Das, Assistant Professor, Dept. of IT, attended Short term course on Future Opportunities and Challenges in 5G Technology from 13/10/2021 to 17/10/2021.

Dr. Moumita Das, Assistant Professor, Dept. of IT, attended ATAL FDP on "Parallel and Distributed Deep Learning" from 28/06/2021 to 02/07/2021.

Mr. Sudeep Ghosh, Assistant Professor, dept. of IT attended ATAL FDP on "Online Elementary FDP on "Block chain" from 14/06/2021 to 18/06/2021.

Mr. Sudeep Ghosh, Assistant Professor, dept. of IT attended ATAL FDP on “Online Elementary FDP on Cyber Security” from 07/06/2021 to 11/06/2021.

Mr. Sudeep Ghosh, Assistant Professor, dept. of IT attended Online Training Programme on Advanced Optimization Techniques and hands-on with MATLAB/SCILAB from 06/09/2021 to 17/09/2021.

Ms. Trishita Ghosh, Assistant Professor, dept. of IT attended ATAL FDP on “Patent Law for Engineers and Researchers from 26/7/2021 to 30/07/2021.

Ms. Trishita Ghosh, Assistant Professor, dept. of IT attended ATAL FDP on “Deep Learning “ from 05/07/2021 to 09/07/2021.

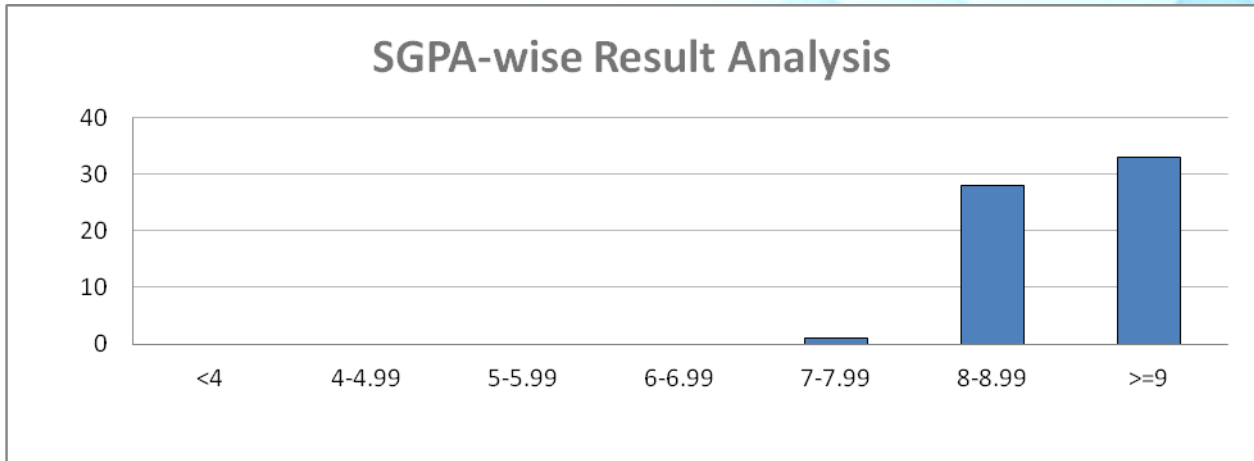
Ms. Trishita Ghosh, Assistant Professor, dept. of IT attended ATAL FDP on Application from 21/06/2021 to 25/06/2021.

Mr. Chowdhury Md. Mizan, Assistant Professor, dept. of IT attended FDP on Challenges and opportunities in VLSI for IOT operation from 21/06/2021 to 25/06/2021.

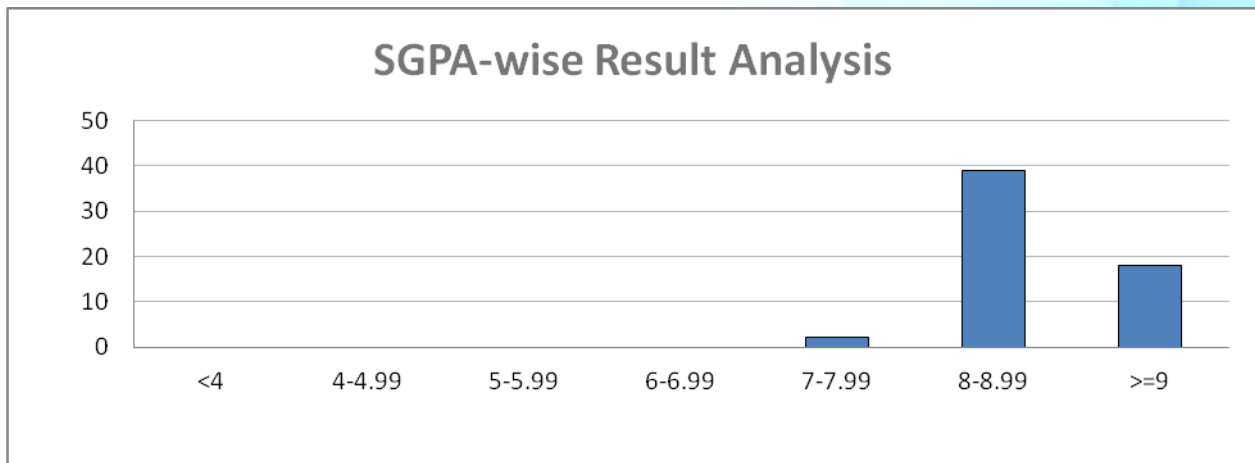
Ms. Trishita Ghosh, Assistant Professor, dept. of IT attended ATAL FDP on “FDP on Future Internet Technology” from 07/06/2021 to 11/06/2021.

Result Analysis

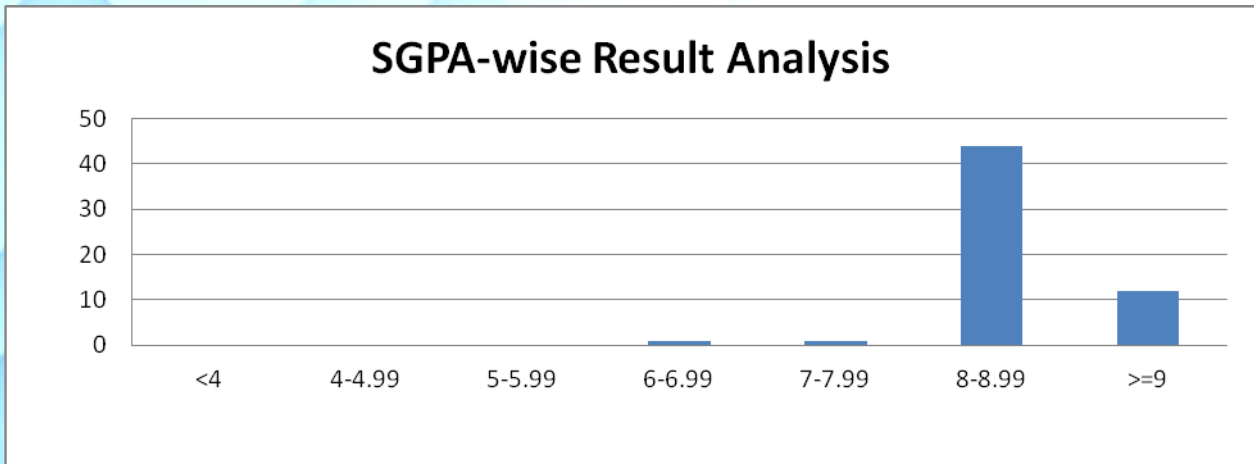
SGPA-wise Result Analysis (IT 2ND YEAR)



SGPA-wise Result Analysis (IT 2ND YEAR)



SGPA-wise Result Analysis (IT 4TH YEAR)



GURU NANAK INSTITUTE OF TECHNOLOGY

Department
of
Food Technology

ANNUAL REPORT

2021-22

Name of the Department: Food Technology

Vision of the department

To become a nationally and internationally recognized institution of Food Technology by producing competent food technologists with respect to industry, research and entrepreneurship leading towards sustainable growth of the nation and imparting service to the society.

Mission of the department

To achieve its own vision the Department of Food Technology is committed to

- * DM-1: To facilitate high quality teaching to produce graduate of international standard
- * DM-2: To prepare students to face challenges in their professional life through skill development
- * DM-3: To promote interdisciplinary work culture to acquire knowledge through research activities and interaction with industries
- * DM-4: To motivate students towards sustainable development of the nation and society through professionalism, proper education, research and social service.

PEO

- * PEO 1: Graduates will apply the knowledge of engineering to design product and process by analyzing and interpreting experimental data.
- * PEO 2: Graduates will use modern techniques, skills and engineering tools necessary in food processing sectors for sustainable development.
- * PEO 3: Graduates will impart knowledge of professional and ethical responsibilities toward the society.
- * PEO 4: Graduates will work in multi-disciplinary fields as a teamplayer or a teamleader.
- * PEO 5: Graduates will pursue higher education, research and other creative and innovative efforts in food technology domain through life-long learning.

Program Outcomes

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

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

Programme Specific Outcomes (PSOs)

- * PSO 1: Graduates will be able to comprehend the concepts of Food Technology and to apply them in various areas like food processing, preservation, packaging, analysis, quality control etc.
- * PSO 2: Graduates will be able to use modern computing technology, analytical skills and engineering tools necessary in food technology and innovation in global and social context.
- * PSO 3: Graduates will have a successful career and to support devotion for real-world applications using optimal resources as an Entrepreneur in the field of Food Technology.

Brief overview of the department

Food Technology is the application of food science to the selection, preservation, processing, packaging and distribution of food. This is used to ensure that a safe, nutritious and wholesome food is made available to the consumer. Food Technologists study the physical, microbiological, and chemical composition of food as well as to develop food process technologies, its characterizations, preservation, packaging and storage of food, according to industry and government specifications and regulations.

The Department has the following laboratories:

Food Processing Lab, Food Analysis and Quality Control Lab, Food Microbiology and Microbial Technology Lab, Food Chemistry Lab, Unit Operation of Chemical Engineering Lab, Sophisticated R&D Lab.

All are studded with various sophisticated equipment like:

Freeze Drier, Cold Centrifuge, Deep Freezer (-23OC), UV-Vis Spectrophotometer, Spectroflurimeter (Perkin Elmer), Gerber Centrifuge, Brookfield Viscometer, Laminar Air Flow Table, BOD Shaker Incubator, Autoclave, Tray Drier, Plate Freezer, Ice cream Churner, Pulper, Fluidized Bed Drier, Spray Drier, Baking Oven, Canning Unit, Homogenizer, Rotary Vacuum Evaporator, Single Screw Extruder, Jaw Crusher and Ball Mill, Heat Exchanger, Packed Bed Distillation Column, Steam Jacketed Kettle, Reynold's Apparatus, Digital Microscope etc.

HOD Message

It is really a matter of great pleasure to welcome you in the Department of Food Technology of Guru Nanak Institute of Technology has sustainably emerged as one of the premier educational institute in the field of Food Technology in West Bengal. The department has NBA accreditation since 2014. Since its inception in 2006 with an intake of 60 students the department has undergone continual improvement by organizing several EDP, Seminar, conference, workshop, and symposium. We offer a blended learning management system to bring together the progressive sustainable management & technical skills of the industry along with academic expertise of highly experienced and Ph. D. faculty members to disseminate knowledge on the various newer advances and developments in the Food Processing Sector and to emphasize on the different Processing Technologies and its relevance not only to the state level but also to the national and international level. Furthermore students of the department published research papers in different reputed National and International journals, presented Research paper in National/International seminar/ conferences, workshop, and symposium with the guidance of faculty members and awarded also in different oral/poster/ quiz/ Competition held in IIT-KGP, JU, BHU, FOSET, etc.

Dr. Kakali Bandhapadhyay
HOD
Food Technology

Departmental achievements

Student's achievements

- * Srishti Mandal, Purnasha Paul, Joyita Khan (The green beam) guided by Ms. Shairee Ganguly, has qualified to the final round of AICTE CHHATRA VISHWAKARMA AWARDS 2020.
- * Ms. Saurjaynee Biswas, was selected as Climate Counsellor of Green Revolution Program (2020-2021) Phase 11 of Kolkata Region on behalf of the United Nations. This is the 3rd consecutive year in a row.
- * Sukanya Ray, attained third place in Debate Competition in AFST I Mumbai - Nutrimahotsav
- * Srishti Mandal, Purnasha Paul, Joyita Khan (The green beam) Guided by Ms. Shairee Ganguly, The Team "The green beam", who secured 3rd position in AICTE Chhatra Viswakarma Award 2020
- * Sk. Adiba Masud, Sukanya Ray, Priyanka Majumdar, secured 3rd position in debate competition in AFST Mumbai Nutrimohstav 2021
- * Mariya Mukherjee, received Kriti award for 2nd year for securing YGPA above 9. Kriti award for 3rd year for securing YGPA above 9.
- * Ayushi Nandy, received 1. Kriti Award for scoring Above 9 YGPA in 2nd year, 2. Kriti Award for scoring Above 9 YGPA in 3rd year, 3. Kriti Award for getting Elite in NPTEL Course (Ethics in Engineering Practice), 4. Kriti Award for securing Top Position with 5% in NPTEL Course (Dairy and Food Process and Products Technology)
- * Varsha Singh, achieved runner up in Brain Freezer event of Food Envision, organised by Food Technology dept. of GNIT.
- * Debarpita Sen, secured the 3rd position in Poster Competition on the topic "Sustainable Agro-Food Industry Solutions", organized by Association of Food Scientists and Technologists-INDIA (AFSTI) , on 16th October 2021.

- * Sukanya Saha, secured the 3rd position in Debate Competition on the topic “Sustainable Agro-Food Industry Solutions”, organized by Association of Food Scientists and Technologists-INDIA (AFSTI) , on 16th October 2021.

Faculty's achievements

- * Department received extension of NBA Accreditation up to June 2022
- * Ms. Shairee Ganguly, Asst. Prof., FT, Acted as mentor of team “The green beam”, who secured 3rd position in AICTE Chhatra Viswakarma Award 2020
- * Department received the certification from Nikhil Bharat Shiksha Parisad (NBSP) for the departmental student chapter
- * Dr. Kakali Bandyopadhyay, received Dr. S. Radhakrishan Bharat Shiksha Award for outstanding Teaching & Learning on Teacher's Day, 5th September, 2021
- * Dr. Kakali Bandyopadhyay, received I2OR National Award 2021 as Distinguished Teacher, I2OR™ is Registered MSME with Ministry of MSME, Govt. of India (UDYAM-PB-20-0002405)
- * Dr. Kakali Bandyopadhyay, received Nikhil Bharat Shiksha Parisad Eminent Researcher Award 2021
- * Dr. Kakali Bandyopadhyay, received Nikhil Bharat Shiksha Parisad World Students' Day Award of Excellence for being an “Enthusiastic Teacher – 2021”
- * Dr. Kakali Bandyopadhyay, acted as Invited Speaker, Department of Home Science University of Calcutta, on 29.06.2021
- * Dr. Kakali Bandyopadhyay, acted as Invited Speaker, Department of Food & Nutrition, University of Kalyani, 21.06.2021

- * Mr. Saikat Mazumder, received research excellence Award 2021 by Institute of Scholars (Unit of SDPL)
- * Mr. Saikat Mazumder, completed Quality Management Systems ISO 9001:2015 Lead auditor training course, TÜV SÜD South Asia Pvt. Ltd. (CQI & IRCA accredited course)
- * Mr. Saikat Mazumder, selected as Reviewer for International Journal of Basic and Applied Sciences.
- * Dr. Souptik Bhattacharya, awarded with PhD degree from Jadavpur University
- * Dr. Souptik Bhattacharya delivered invited talk on “Foodology The Nutri Talk Show” organized by KONTHO- The Voice of Empowerment on 18th September 2021.
- * Ms. Monika Paul, published research paper in web of science indexed journal.

Departmental Events Organized

- * 3rd year students visited Bhagwati Foods Private Limited (Franchise of Parle Biscuit) on 29.11.2021 with faculty members.
- * Webinar on " Power of Thoughts" on 01.06.2021
- * Webinar on “Health care nutrition: How to overcome the challenges during Covid 19 pandemic” on 05.06.2021
- * Webinar on “National Level Food Safety Initiatives for Atmanirbhar Bharat” on 07.06.2021
- * FDP on “Harnessing the Knowledge of Value Addition Network in Food Technology” 08-12. 06.2021

Department of Food Technology

- * Workshop on “Bakery Facts: Welcome to Virtual Industry Tour” on 15.06.2021
- * Webinar on “IOT in Precision Farming and Food Manufacturing” on 25.6.2021
- * Webinar on "Orientation Towards Customer relationship with Food Safety in Industry 4.0" on 24.07.2021
- * Webinar on “New Food Development: How R & D works in Food Industries” on 31.7.2021
- * Workshop on “Entrepreneurship as carrier opportunity” on 26th November 2021
- * Workshop on “Entrepreneurship life-motivational session” on 27th November 2021
- * Workshop on “Introduction to Food Technology” on 25th September, 2021
- * Parent teacher meet was organized during 08.10.2021 to 10.10.2021 for 2nd, 3rd, 4th year students



- * Workshop on “Best practices for teaching online” on 04.07.2021, organized by ABP Education
- * Webinar on “IEEE - ABET Webinar on Accreditation and Quality of Engineering Education in South Asia” on 08.07.2020, organized by IEEE India Council
- * Leadership Talk with Shri Shashi Shekhar (CEO- Prasar Bharti) on 11.07.2020, organized by MHRD’s Innovation Cell
- * Workshop on “A Viewpoint on Pharmaceutical Research – Getting The Concept
- * Right, Learning What you Need and Collaborate with Peers ” on 18.07.2020, organized by GNIPST
- * Webinar on “Misconduct in Teaching and Research” on 21.07.2020, organized by Department of Chemical Technology, University of Calcutta, Kolkata
- * Webinar on “Leadership in Turbulent Times, The family Business New Era, Fresh Opportunities” on 24.07.2020, organized by CMA
- * Webinar on “CONVERSATIONS” on 25.07.2020, organized by CMA
- * Webinar on “Life Style Modification – Protection From Covid-19 In Connection With Immunity Boost Up & Dietary Guidelines For The Citizens” on 26.07.2020, organized by Department of Nutrition and Dietetics, Paramedical College-Durgapur
- * Webinar on “HPTLC: Technique and Applications” on 27.07.2020, organized by Anchrom Enterprises (I) Pvt. Ltd., Mumbai. and Guru Nanak Institute of Pharmaceutical Science and Technology, Kolkata
- * Webinar on "Farmer Producer Organizations and Commodity Markets" on 27.08.2020, organized by Centre for Agricultural Market Intelligence,

AAU, Anand

- * Webinar on “Dynamic shifts in dissemination of education for the future” on 30.07.2020, organized by BCC&I
- * Webinar on “Vice Chancellor's Round Table on the Future of Higher Education in the New Era.” On 01.08.2020, organized by Webinar on “Vice Chancellor's Round Table on the Future of Higher Education in the New Era.”
- * Panel Discussion on Covid-19 Impact on Water Resources on 04.08.2020, organized by UPES, Dehradun, Uttarakhand
- * Webinar on “Molecular basis of regulation of transcription by second messenger ” on 06.08.2020, organized by Centre for Molecular and Nanomedical Sciences, Sathyabama Institute of Science and Technology, Chennai.

Webinar on “Covid-19: Past, Present and Future” on 07.08.2020, organized by Department of Chemical Technology, University of Calcutta, Kolkata

International Webinar on “How To Turn Engineers To Entrepreneurs” on 09.08.2020, organized by Mar Baselios Institute of Technology and Science (MBITS) in association with Kerala Startup Mission & VSSC, ISRO; organized by IEDC & COVID’19 CELL, MBITS

Webinar on “Selenium: Health Benefits and Risk” on 10.08.2020, organized by Centre

for Molecular and Nanomedical Sciences, Sathyabama Institute of Science and Technology,

Chennai

One week short term training program on “Recent Trends in Internet of Things (IoT)and embedded systems Based Monitoring and Control of Dis-

tributed Systems” from 10.08.2020 to 15.08.2020, organized by AICTE sponsored and organized by Electrical Engineering Department Of Narula Institute of Technology

Faculty Development Program on “Tracing the contours of new normal: Post Covid-19” from 11.08.2020 to 16.08.2020, organized by Departments of Applied Science and Humanities and Food Technology, GNIT

Webinar on “Bengal Education Leaders’ Summit with Education minister ParthaChatterjee: Is Higher Education in Bengal today geared for Careers of Tomorrow?” on 12.08.2020, organized by ABP Education

Webinar on “Lessons from Leading in Turbulent Times ” on 16.08.2020, organized by CMA.

Webinar on “Online Learning Resources & Virtual Labs for Self learning of

Pharmaceutical Sciences in CoVID Era” on 22.08.2020, organized by GURU NANAK INSTITUTE OF PHARMACEUTICAL SCIENCE & TECHNOLOGY

Webinar on “Leadership in Turbulent Times, Opportunities in a new Digital World on 23.08.2020, organized by CMA

Webinar on “Rebuilding India’s Economy Post COVID-19” on 28.08.2020, organized by CMA

International Webinar Series, on “The occasion of National Nutrition Month, 2020, on 01.09.2020, organized by Department of Home Science University of Calcutta

Training on “Research methodology on social sciences” on 01.09.2020, organized by National Agricultural Higher Education Project – CAAST Centre for agricultural market intelligence

Webinar on “Pursuing a clean Air Agenda in India during Covid Crisis” on 07.09.2020, organized by CMA

International Webinar on “Response of the DBT’s Autonomous Institutes to COVID-19 (Part II)” on 10.09.2020, organized by India Alliance

Webinar on “Sensing & Shaping Post-COVID Era” on 12.09.2020, organized by CMA

National Webinar on “ Green Technology in Food Processing” on 15.09.2020, organized by National Agricultural Higher Education Project (NAHEP) – Innovation Grant Faculty of Dairy Technology West Bengal University of Animal & Fishery Sciences

Workshop on “Trade in F&V Products and dairy Commodities” on 15.09.2020, organized by National Agricultural Higher Education Project – CAAST Centre for agricultural market intelligence

Webinar on “Market dynamics in poultry sector: Perspectives and challenges” on 17.09.2020, organized by National Agricultural Higher Education Project – CAAST Centre for agricultural market intelligence

Two day virtual workshop on "Advanced Technique for Functional and Compositional Analysis and Tracing of Contaminants in Food" from 22.09.2020 to 23.09.2020, organized by Department of Food Technology, GNIT in association with Perkin Elmer, India

Webinar on “Banking, Markets & Economy” on 25.09.2020, organized by CMA

Webinar series with Taylor & Francis Part 2: “Publishing ethics and integrity” on 25.09.2020, organized by EURAXESS India

Webinar on "Agricultural Market Intelligence“ on 03.10.2020, organized by National Agricultural Higher Education Project

Webinar on “Industry 4.0 and the Blockchain Technology” on 04.10.2020, organized by Department of Computer Science Engineering, JIS College of Engineering

Lecture series on "Incredible Chicken Eggs" on 09.10.2020, organized by National Agricultural Higher Education Project

Webinar on “Leadership in Turbulent Times, INDIAN ECONOMY POST COVID-19” on 10.10.2020, organized by CMA

Workshop on “Technical Writing: Tips, Tricks and Tools” on 10.10.2020,

organized by JIS UNIVERSITY in Association with institution's innovation council

Webinar on "Role of 21st Century Skills in Effective Online Teaching" on 10.10.2020, organized by Greater Kolkata College of Engineering and Management

Webinar on " Next Generation Antibiotics" on 12.10.2020, organized by JISIASR, Kolkata , Dept.of chemistry , NBU

Webinar on "Technical Writing" from 16.10.2020 to 17.10.2020, organized by Centre for Agricultural Market Intelligence, AAU, Anand

Webinar on "Industry Needs from Academia" on 20.10.2020, organized by CSI Student Chapter, JIS College of Engineering in association with CSI Kolkata Chapter

Webinar on "Dough Rheology: Advantages to Flour and Bakery Industry" on 20.10.2020, organized by Perkin Elmer, India

Webinar on "Outcome Based Education and Accreditation for the Engineering Colleges in West Bengal" on 15.12.2020, organized by NBA and MAKAUT

Webinar on "Paradigm Shift in Mechanization of Futuristic Agriculture" on 16.12.2020, organized by Centre for Agricultural Market Intelligence, NAHEP-CAAST, AAU, Anand

Short Term Training Programme on "Cyber Security - Current Trends and Future Perspective" from 14.12.2020 to 19.12.2020, organized by AICTE

Online Seminar on 'Underutilized Horticultural crops' on 05.01.2021, organized by Centre for Agricultural Market Intelligence, NAHEP-CAAST, AAU, Anand

Webinar on "Nurturing Entrepreneurship in Food and Agro- Processing (NEFA-2021)" on 16.01.2021, organized by Agri. & Food Business Incubator, Anand Agricultural University, Anand, Gujarat

75th OTAI annual convention and seminar on 28.02.2021, organized by Oil Technologists' Association of India

Webinar on "Online Training on Sandalwood" on from 09.04.2021 to 11.04.2021, organized by Agri. & Food Business Incubator, Anand Agricultural University, Anand, Gujarat

SDP Program entitled "Computer Hardware, Networking & Machine Handling " from 07.04.2021 to 09.04.2021, organized by CSE, GNIT

Short Term Training Programme through ICT Mode on "Concept Mapping in Teaching Learning " from 28.12.2020 to 01.01.2021, organized by NTTR

Short Term Training Programme through ICT Mode on "Outcome Based Curriculum-Design and Implementation" from 04.01.2021 to 08.01.2021, organized by NTTR

Webinar on "Financial Risk Analysis" on 04.04.2021, organized by Asian Great Learning Academy

Webinar on "Lean Practitioner" on 11.03.2021, organized by Asian Institute of Quality Management (Division of Vijigeeshu QMS Pvt. Ltd.)

STTP on "Induction Training" from 18.01.2021 to 22.01.2021, organized by NITTTR, Kolkata

Online FDP on the theme "Inculcating Universal Human Values in Technical Education" from 18.01.2021 to 22.01.2021, organized by All India Council for Technical Education(AICTE)

AICTE ATAL sponsored 5 day online faculty development program on "Innovation Management for Nurturing Entrepreneurship Culture in Educational Institutes" from 21.06.2021 to 25.06.2021, organized by Bombay College of Pharmacy

AICTE ATAL sponsored 5 day online faculty development program on "Bioconversion Technologies and Start-up Opportunities in Biofuels Production" from 14.06.2021 to 18.06.2021, organized Silver Jubilee Govt College, Kurnool, Andhra Pradesh.

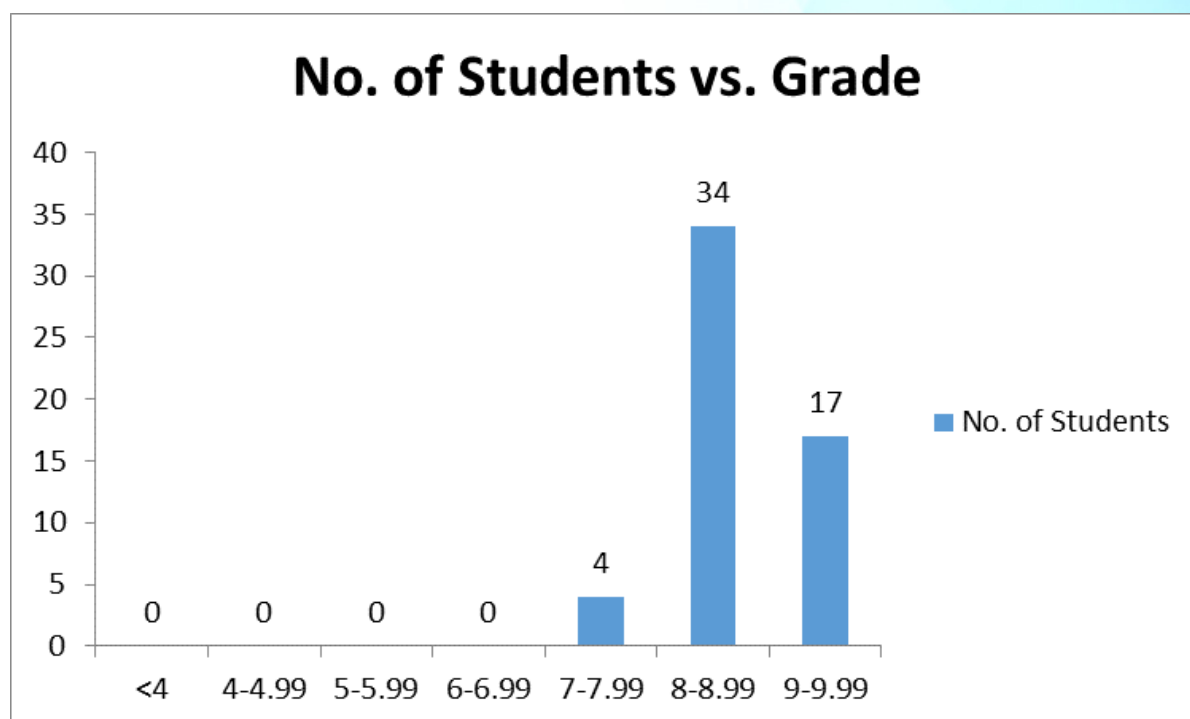
AICTE ATAL sponsored 5 day online faculty development program on

“Recent Trends in Chemical s and Allied Industries” from 21.06.2021 to 25.06.2021, organized by Govt. Polytechnic Daman

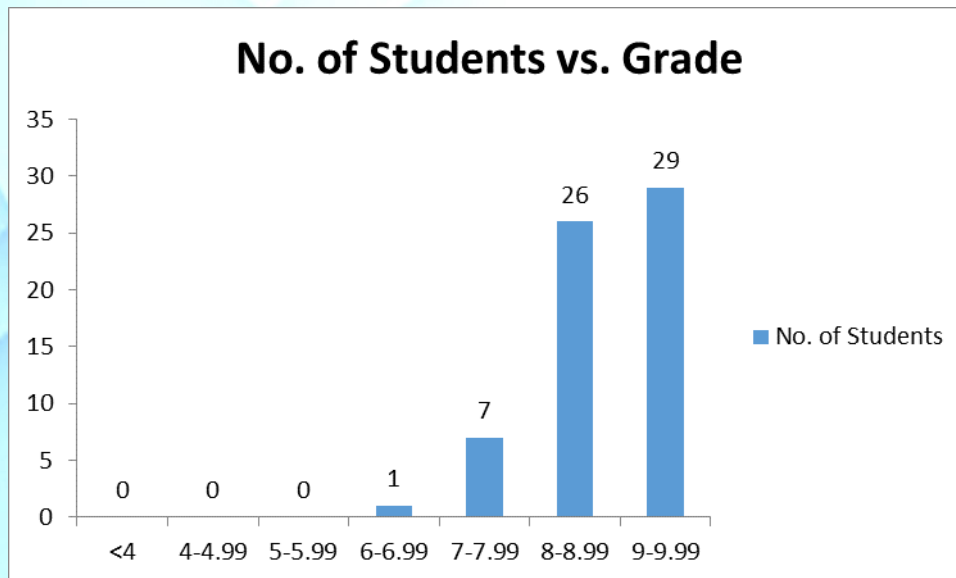
FOSTAC training of FSSAI on 15.06.2021, organized by Food Tech Club
BHUPATINAGAR PURBA MEDINIPUR West Bengal

Result Analysis

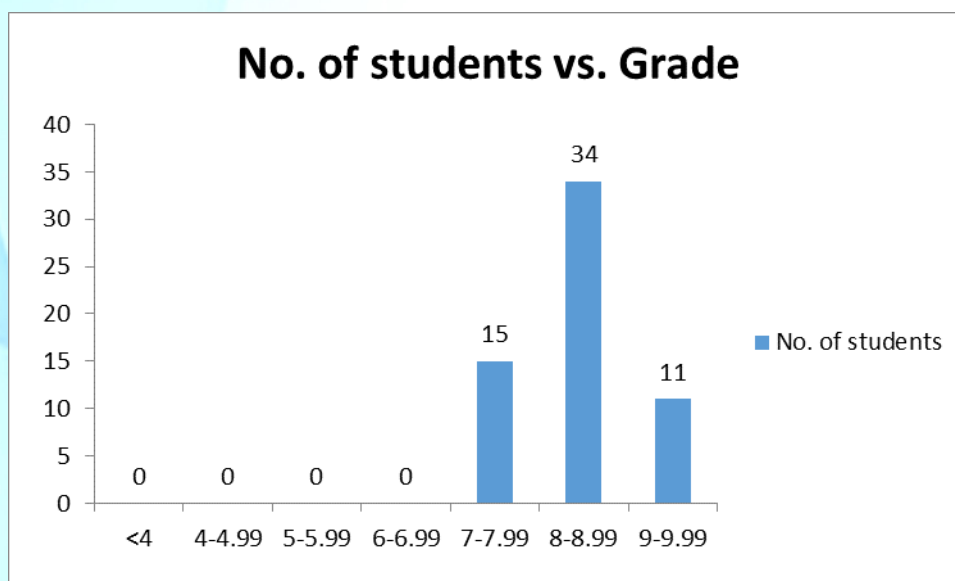
YGPA-wise Result Analysis (FT 2ND YEAR)



YGPA-wise Result Analysis (FT 2ND YEAR)



YGPA-wise Result Analysis (FT 2ND YEAR)



GURU NANAK INSTITUTE OF TECHNOLOGY

Department
of
Applied Science & Humanities

ANNUAL REPORT

2020-21

Name of the Department: Applied Science & Humanities

Vision of the department

To nurture students through intellectual, moral and value based education, enabling them to contribute innovatively toward Science and Technology to become future leaders in their profession and responsible citizens

Mission of the department

- * Enabling the smooth transition of a 12th passed out student towards a successful career in engineering by bridging the gap between science and technology.
- * Creating a teaching - learning environment conducive to the pursuit of higher knowledge, relevant skills and experience.
- * Training them in the basic ethical values of profession.
- * Enabling awareness on ecological and environmental issues, sensitizing on current socio-economic issues.
- * Providing exposure to basic principles of management and business economics needed by the present day professionals.
- * Providing awareness building on language use by technical professionals and corporate behavior and etiquette through aptitude and soft skill training.
- * Creating a conducive research environment leading to consultancy and extension activities and making them industry ready.

Program Outcomes

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

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

Brief overview of the department

Food Technology is the application of food science to the selection, preservation, processing, packaging and distribution of food. This is used to ensure that a safe, nutritious and wholesome food is made available to the consumer. Food Technologists study the physical, microbiological, and chemical composition of food as well as to develop food process technologies, its characterizations, preservation, packaging and storage of food, according to industry and government specifications and regulations.

The Department has the following laboratories:

Food Processing Lab, Food Analysis and Quality Control Lab, Food Microbiology and Microbial Technology Lab, Food Chemistry Lab, Unit Operation of Chemical Engineering Lab, Sophisticated R&D Lab.

All are studded with various sophisticated equipment like:

Freeze Drier, Cold Centrifuge, Deep Freezer (-23OC), UV-Vis Spectrophotometer, Spectroflurimeter (Perkin Elmer), Gerber Centrifuge, Brookfield Viscometer, Laminar Air Flow Table, BOD Shaker Incubator, Autoclave, Tray Drier, Plate Freezer, Ice cream Churner, Pulper, Fluidized Bed Drier, Spray Drier, Baking Oven, Canning Unit, Homogenizer, Rotary Vacuum Evaporator, Single Screw Extruder, Jaw Crusher and Ball Mill, Heat Exchanger, Packed Bed Distillation Column, Steam Jacketed Kettle, Reynold's Apparatus, Digital Microscope etc.

HOD Message

We, at the ASHU Dept have continued to prove that innovation is the new normal this year. In spite of the lockdown and the devastation of cyclone Amphan, we have carried on teaching, mentoring, taking online exams and tutorials, organizing a webinar series with a stellar cast of resource persons! Our faculty and staff have carried on all normal activities despite the constraints we have faced. Our students, of course, have been our mainstay and support. On the whole it has been a difficult time but I am glad to say we have risen to the challenge. , etc.

Dr. Sucharita Chakroborty
HOD,
Applied Science & Humanities

Departmental Achievements:

(a) Faculty Achievements

- * Faculty members who won distinguished positions in various NPTEL-SWAYAM courses (including ELITE-SILVER): Dr Sucharita Bhattacharyya, Dr Soma Mukherjee, Mr Dipanjan Bhattacharjee, Ms Soumi Patra, Dr Indrajit Bhattacharjee, Dr Sreyasree Basu, Dr Mainak Debnath, Dr Indrajit Bose, Mr Sourav Majumder.
- * Sourav Majumder, Asst Professor of Mechanical Engineering, attended FDP on "Research and Technical Challenges in Energy and Power System"(29.06.2020 to 4.07.2020) by Dept. of EE, Narula Institute of Technology, FDP on "3D Printing & Design"(1st to 5th September 2020) FDP on "Additive Manufacturing" (21st to 25th September 2020) from Atal Academy, and International FDP on "Advances in Technologies, Evolving New Dimensions in E-Society" (2nd to 6th September 2020) at JISCE, Kalyani, FDP on "Machining Science" (18.01.2021 to 12.02.2021) NPTEL-AICTE, attended E-Workshop on "Staad Pro"(18.11.2020) by Dept. of Civil Engg., GKCEM, Baruipur, Online FDP on "Universal Human Values for Deeksharambh"(23.11.2020) by Dept. of

Mechanical Engg., NIT Patna, International Conference on "Innovation Quality Enrichment and Excellence in Education"(22.12.2020) JIS University & Institution's Innovation Council, Live Webinar on "Introduction to Inner Engineering" (29.12.2020), Webinar on "Application of Algebra in Real Life"(8.2.2021) by Mathematics Club of GKCEM, Baruiipur.

- * Soumi Patra, Assistant Professor of Physics, attended National webinar on Cosmology"Observing the origin and the evolution of our Universe"(23rd to 29th September 2020) at Bhairab Ganguly College, Dept of Physics.
- * Dr Sucharita Bhattacharyya, Associate Professor of Physics, attended 8 wk FDP on Electronic Waste Management (January-June 2020) by IIT, KGP, Laser : Fundamentals & Applications by IIT, KGP, Webinar on Faculty Development Schemes (18th August 2020) by Faculty Development Cell (FDC), AICTE, Webinar : MINDISK by Techno India Group - Let's Program a Peaceful Mind (8.8.2020), Education Tech Summit 2020 (23.07.2020) by Exito, Bangalore.
- * Sanjoy Biswas, Assistant Professor of Mathematics, attended FDP on Recent Trends in Internet of Things (IoT) and Embedded System Based Monitoring and Control of Distributed Generation (24.08.2020) by AICTE Sponsored STTP, EE Dept, NIT.
- * Debayan Mandal, Assistant Professor of Mechanical Engineering, attended a Webinar on "Importance of Software in Mechanical Engineering"(28.09.2020).
- * Dipanjan Bhattacharjee, Assistant Professor of Physics, attended Online FDP on Quantum Computing (24.08.2021) by Ministry of Electronics & IT(MeitY), Govt. of India.
- * Dr Soma Mukherjee, Assistant Professor of Physics, attended International Web Conference on Recent Advances in Nanoscience & Nanotechnology for High-end Applications (IWCANHA 2020)(25.7.2020 and 26.07.2020) by ASHU, Assam University, Silchar in association with The society for Technologically Advanced Materials of India (STAMI), and attended the 3rd National Conference on Science, Technology and Communication Skills (NCSTCS 2K20) (25.09.2020 and 26.09.2020).
- * Dr Indrajit Bose, Assistant Professor of English, participated in the "INFOSYS CAMPUS CONNECT Webinar on SOFT SKILLS"(29.06.2020 to 3.07.2020), was a Speaker at Webinar "**Modernism in Perspective**" (20.8.2020 to 21.08.2020) by Dept of English & IQAC, Loreto College and Lady Brabourne College, Kolkata, and was a speaker at the "**Refresher Course on Communication Skills**"(24.09.2020 and 25.09.2020) by CEMK, Kolaghat, and presented a paper on "**Culinary Chroniclers of Bengal: Pioneering Bengali Women's Cookbooks**" (11.3.2021 and 12.03.2021) by FOWT-2021 Conference held at Narula Institute of Technology. Kolkata.
- * Dr Mainak Debnath, Assistant Professor of Chemistry, attended One Day National Level Webinar on "Recent Trends and Developments in Chemistry"(10.09.2020) organized by Department of Chemistry, Kalna College, with support from the IQAC, Kalna College, National level webinar on "Chemistry for a smarter and better world"(20.09.2020) by Organized by Science college, Hinjilicut, Odisha, and 2 Day - **Webinar on Advanced Technique for Functional and Compositional Analysis and**

Tracing of Contaminants in Food (22.9.2020 to 23.9.2020) by Dept. of FT, GNIT in collaboration with Perkin Elmer.

- * Dr Sreyasree Basu, Assistant Professor, Chemistry attended International Webinar on "**Selenium: Health Benefits and Risk**" by Dr. K. Kalishwaralal, Postdoctoral Research Associate, University of Pittsburgh, USA (10.08.2020) Organized by Centre for Molecular and Nanomedical Sciences, International Research Centre (IRC), Sathyabama Institute of Science and Technology, Chennai and International webinar on "**Local Drug delivery to the Injured Cervical Spinal Cord using Engineered Hydrogel Preserves Diaphragm Function**" by Dr. Biswarup Ghosh, senior research instructor and faculty, Thomas Jefferson University, Philadelphia, USA (27.08.2020) organized by IE student chapter of Department of Applied Electronics & Instrumentation Engineering, GNIT and International Webinar on "**Role of Serine Rich Splicing Factor 3 (SRSF3) in Liver Disease**" by Dr. Deepak Kumar, Project Scientist, Department of Medicine, University of California, San Diego, USA (29.8.2020) Organized by Sathyabama Institute of Science and Technology, Chennai, Tamilnadu.
- * Dr Indrajit Bhattacharjee, Assistant Professor, Chemistry attended a Webinar on "**How not to waste a good crisis**" by Mr. Kurush Grant, former executive director of ITC (27.08.2020) and **Awareness Program on Outcome Based Education and Accreditation for the Engineering Colleges in West Bengal** (15.12.2020) by MAKAUT and International Conference on "Innovation Quality Enrichment and Excellence in Education (22.12.2020)
- * Ms Namrata Chakraborty, Assistant Professor, English attended FDP- ROAD - Response Effectiveness, Organising Self, Attitudinal Shift, Decision Making (23-27.11.2020) by **AICTE Training and Learning Academy ATAL FDP** and International Conference on English Learning and Teaching Skills (8.12.2020 to 12.12.2020) by Institute of Engineering and Management, Kolkata.
- * Mr Gautam Mondal, Assistant Professor, Mathematics, attended AICTE Sponsored Short Term Training Programme on Recent Trends in Internet of Things (IoT) and Embedded System Based Monitoring and Control of Distributed Generation (24.8.2020 to 29.8.2020) by Dept of EE, NIT, Kolkata, International FDP on "Advances in technologies, evolving new dimensions in e-society" (2.9.2020 to 6.9.2020) by Department of Computer Science and Engineering, JIS College of Engineering, West Bengal, attended the AICTE Sponsored QIP Short Term Course (online) on "**Matrix Computations and its application in systems, signal, and control problems**" conducted as a part of quality improvement program (16.02.2021) Organized by the Department of Mathematics, IIT Indore.
- * Dr A. K. Thandar attended AICTE QIP on Matrix Computation from IIT Indore (16.02.2021), ICTE QIP on HPC from IIT Kgp (8.2.2021-12.02.2021) and AICTE QIP on Operations Research from IIT Kanpur (1.3.2021 to 5.3.2021).

(b) Students Achievements

- * Hrishita Sarkar (FT 1st year) Secured 1st position in photography competition "Through The Lens" organized by ASHU department.
- * Md. Meraj Ansari (FT 1st year) Secured 2nd position in photography competition "Through The Lens" organized by ASHU department.
- * Vanshika Verma (ECE 1st Year), Secured 3rd position in photography competition "Through The Lens" organized by ASHU department.
- * Prathit Bandopadhyay of EE 1st Year Participated and successfully completed Microsoft AI Classroom Series test program aired Internationally on 27th March, 2021 and received E-certificate.
- * Soumyadeep Ghosh of ECE 1st Year successfully secured Women with Disabilities Champion (Open Positions - 1000) internship at Atypical Advantage through Internshala and received E-Certificate.
- * Suditi Jana, Santanu Dutta, Abhishek Kr Jha and Raka Basu all successfully completed NPTEL courses.
- * Madhumita Dutta, Anubhav Roy, Oindrilla Banerjee, Tathagata Munshi, Sahil Dey, Bhaskar Paul, Rajib Lochan Nandy, Sreya Dan, Koena Saha, Prathit Bandopadhyay, all successfully completed COURSERA courses.

Seminars, Conferences & Webinars organized by the Dept (in-house):

- * Webinar on "**MMICs and Its Components for Communication Technology**" by Mr. Saptarshi Pathak, Senior Executive Engineer, Gallium Arsenide Enabling Technology Centre, DRDO, Hyderabad, on 7.06.2020, with over 150 participants.
- * National Webinar on "Newton's Laws of Motion: Beyond the Textbook " by Prof (Dr) Souri Banerjee, Professor, Department of Physics and Dean Faculty Affairs, BITS Pilani, Hyderabad Campus, on 2.7.2020 with 120 participants.
- * Thoughtshop on Upstart with Startup, by Mr. Arijit Hajra, CEO at Think Again Lab, NASA Space Apps-India Lead and Josh Talk Speaker on 4.7.2020 with 300 participants.
- * Beyond Curriculum Training on AutoCAD for the students of 3rd Sem by Sourav Majumdar, Asst Prof and Ashok Ghosh, JTA, Mechanical Engineering on

17.08.2020 to 21.08.2020.

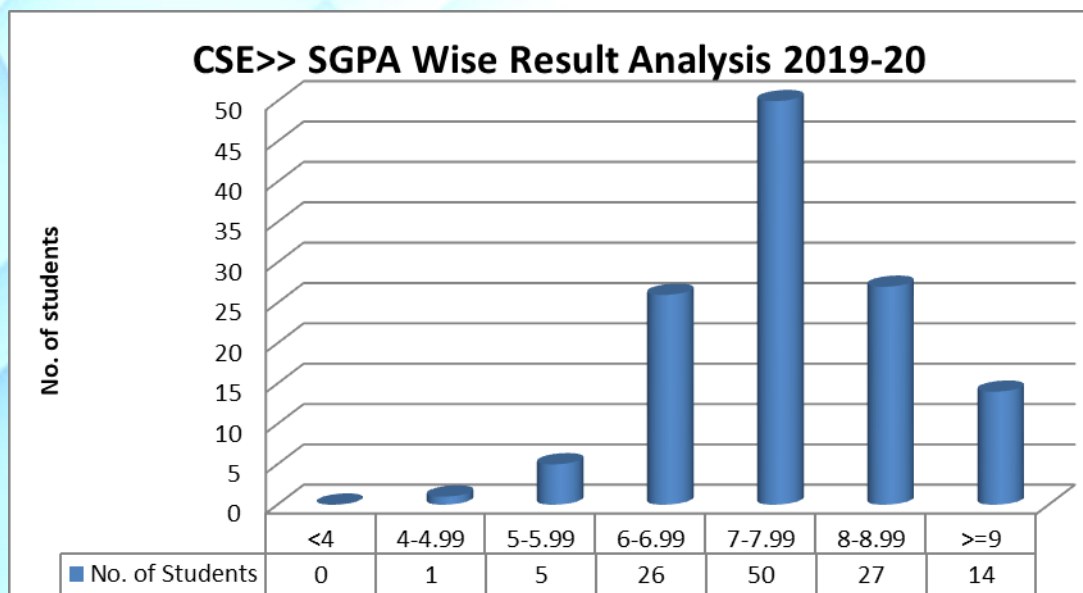
- * Beyond Syllabus training on "Introduction to Instrumental Methods of Analysis, by Dr Mainak Debnath, Asst Professor, Chemistry (18.08.2020), Beyond Syllabus training on "Chemical Engineering Thermodynamics" by Dr Sreyasree Basu, (18.08.2020), Beyond Syllabus training on "Introduction to Instrumental Methods of Analysis": Experimental session (18.08.2020) by Chemistry Section, ASHU. Beyond Syllabus training on "Waste Water Treatment"(20.08.2020) by Dr Indrajit Bhattacharyya, Beyond Syllabus training on "Surface Water Treatment" (20.08.2020) by Dr Mainak Debnath, Beyond Syllabus training on "Waste Water Treatment": Experimental session (20.08.2020) by Chemistry Section, ASHU.
- * FDP "**Tracing the Contour of New Normal: Post COVID 19**"(11.8.2020 to 16.08.2020), jointly organized by Applied Science And Humanities, Food Technology Departments of GNIT, with over 37 participants and many distinguished Resource Persons from India and abroad.
- * International webinar on "Numerical Modeling of Flow-Mechanics Problem in Fractured Reservoir by Dr Rajdeep Deb, **Senior Research Scientist, ETH Zurich, Switzerland, on 10.10.2020.**
- * A webinar on "Change in Examination System under COVID 19 : The Open Book Examination " for the students of CSE and IT, by Dr Sucharita Bhattacharyya, Associate Professor of Physics on 13.10.2020 and A webinar on "The Open Book Examination System" for the students of EE and AEIE 2nd Year (19.10.2020).
- * Webinar on "Social Activities and Human Values" by philanthropist and social worker, Mr Suman Kar on 18.11.2020, attended by 200 participants.
- * A webinar on "Stress Management" by Ms Srishti Saha, Clinical Psychologist, Fortis & Peerless Hospitals, Kolkata.
- * A webinar on NSS activity of ASHU department on 25.11.2020 by Dr Sucharita Bhattacharyya and Dr Mainak Debnath.
- * "**International Conference on Environment and Sustainable Development**" **ICESD-2021, 27-28 February 2021**, with 127 participants and many foreign delegates (from London, UK and University of Bolton, Ras-al-Khaimah, UAE).
- * On 12th May, Dr Debiprasad Duari, Director of the Birla Planetarium, Kolkata, inaugurated the GNIT Space Club. Students were held spellbound by Dr Duari's illuminating talk on cosmology.
- * On 5th May, in the Webinar "**How Not to Study Words**", Mr Dhruv Raj Sharma, CEO of Logophilia Education, spoke illuminatingly on techniques for English vocabulary enhancement.
- * A program, "Nurturing the Nature" to commemorate **World Environment Day** was Products developed by the Dept:

- * Team Chemistry, GNIT, comprising of Dr Sreyasree Basu, Dr Mainak Debnath, Dr Indrajit Bhattacharjee and Mr Chandan Bhattacharyya, came up with their hand sanitizer (WHO-recommended) and a new organically developed floor cleaner, “Safe Touch.”

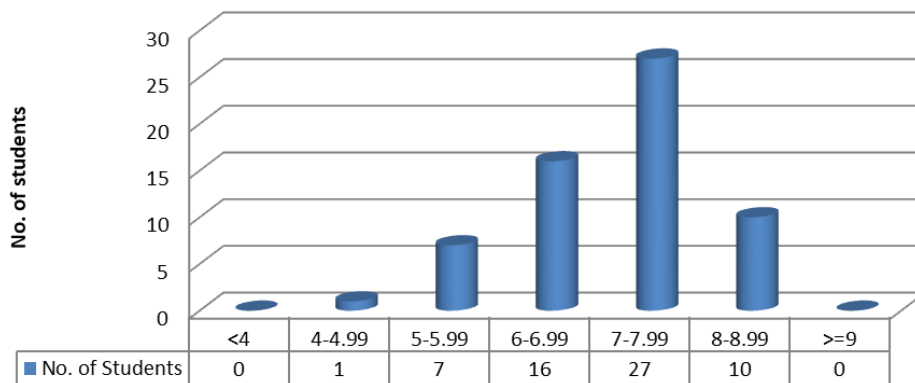
Social Awareness Activities:

- * Dept students and faculty have been continuously involved in social awareness activities to aid the distressed and the needy.
- * Students raised funds for PM Cares, the Prime Minister’s Relief Fund, during the lockdown and pandemic in March-April 2020.
- * They made masks, sanitizers and helped in the distribution of foodgrains, bread, sanitization materials and other essential commodities during the first lockdown in March-June 2021.
- * They took part in relief camps in the Sunderbans in June 2020, distributing food packets, clothes, building materials and other essential relief supplies to the cyclone-affected villagers after the ravages of Amphan in May2020.
- * Students also took part in the distribution of blankets to the destitute in Dum Dum station in December 2020, as part of the NGO Pragati’s welfare schemes.
- * Faculty members, students and staff distributed foodpackets and books to the Sabar girls in Satyabati orphanage in Belpahari in February-March 2021.
- * 7th International Day of Yoga (IDY, 2021) was celebrated on 21st June 2021in the virtual platform by GNIT NSS Unit (SFU) with much enthusiasm and encouragement.
- * An Anti-Plastics campaign was also organized on campus.

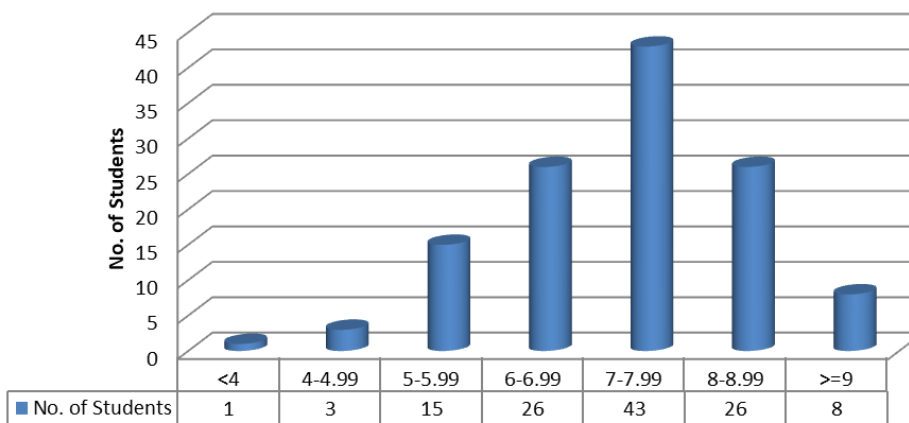
Result Analysis



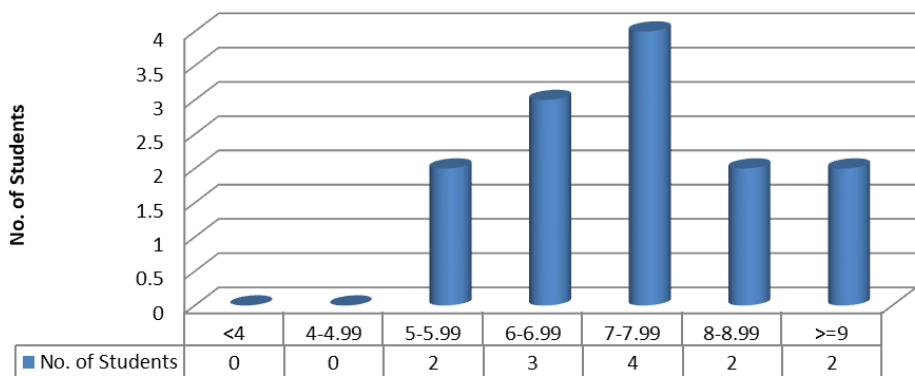
IT>> SGPA Wise Result Analysis 2019-20



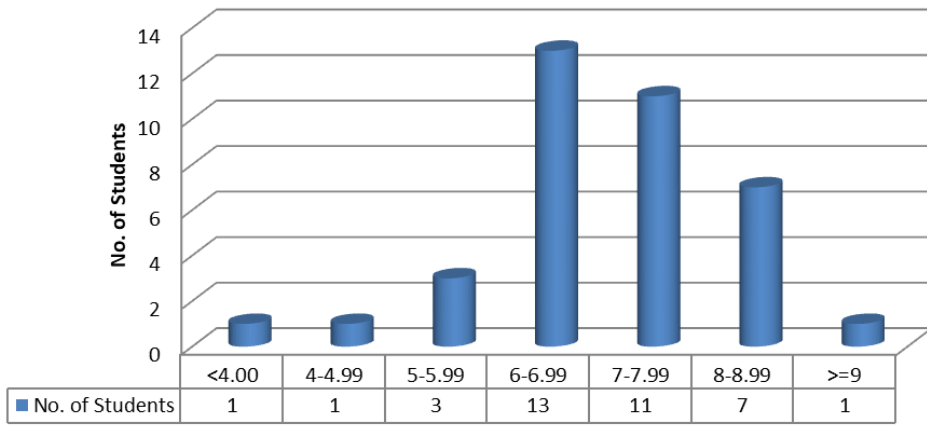
ECE>> SGPA Wise Result Analysis 2019-20



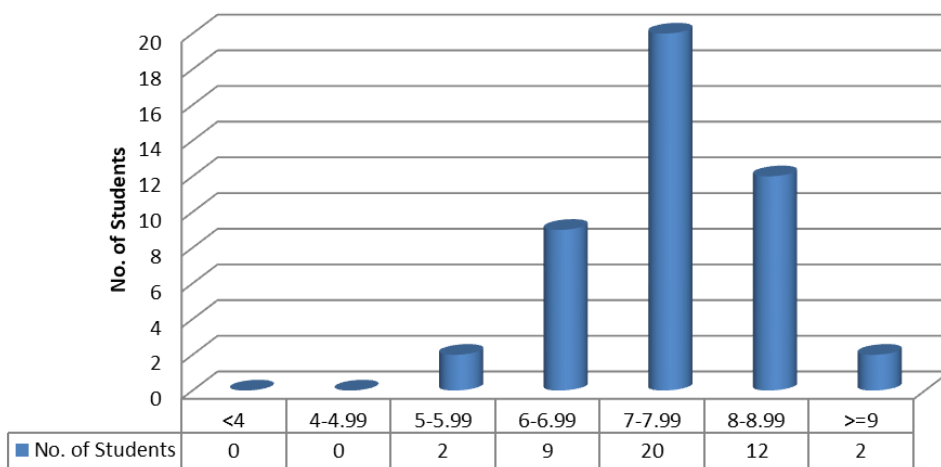
AEIE>> SGPA Wise Result Analysis 2019-20



EE>> SGPA Wise Result Analysis 2019-20



FT>> SGPA Wise Result Analysis 2019-20



GURU NANAK INSTITUTE OF TECHNOLOGY

Department
of
Applied Electronics and
Instrumentation Engineering

ANNUAL REPORT

2020-21

Name of the Department: Applied Electronics and Instrumentation Engineering

Vision of the department

The Vision of the department is to create Electronics & Instrumentation engineers with outstanding technical competency acceptable worldwide to impart research aptitude for societal benefit.

Mission of the department

- * M1: To provide high quality technical education and training in response to the changing needs of industries and society through an innovative learning process related to Applied Electronics and Instrumentation Engineering.
- * M2: To develop employable and competent Electronics and Instrumentation Engineers with high academic credentials and to inspire them to take up higher studies and research.
- * M3: To contribute towards the betterment of society by imparting practical skills and technical knowledge to the students.
- * M4: To make engineers with high professional ethics, social and human values and responsive to community needs.

PEO

PEO1: Graduates of Applied Electronics and Instrumentation Engineering program will be able to incorporate their knowledge to excel in professional career and also use the fundamental knowledge to enhance the power of invention, innovation & entrepreneurship.

PEO2: Graduates of Applied Electronics and Instrumentation Engineering program will have strong foundation in mathematical, scientific and engineering fundamentals necessary to formulate, solve and analyze engineering problems related to industry and research through lifelong learning.

PEO3: Graduates of Applied Electronics and Instrumentation Engineering program will be able to inculcate the professional and ethical code of conduct, communication skills, and team work so as to use technology for the progress to the society..

Program Outcomes

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

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

Programme Specific Outcomes (PSOs)

PSO 1: Apply their knowledge related to design, installation & operation of the basic instrumentation systems used in industrial environments.

PSO 2: Use scientific & engineering fundamentals, skills & tools to formulate, solve & analyze instrumentation problems related to industry & research.

Brief overview of the department

The department of EIE was established in the year 2003. This department emphasizes to create technical professionals who are keen to take engineering responsibilities with a vast knowledge of entire process, medical instrumentation and power plants – a specialization that has grown leaps and bounds in the recent years. The department is equipped with state of the art laboratories to impart technical skill to the students to make them proficient engineers. Instrumentation engineering is a specialized branch of electrical and electronics engineering and it deals with the sensing, signal conditioning, measurement, control, Internet of things, Artificial Intelligence and as a whole automation of process industries. Apart from encompassing core subjects such as industrial instrumentation, process control, control theory, courses offered on bio-medical instrumentation, analytical instrumentation, mechatronics, robotics, software development, hardware topics like microprocessor and microcontroller-based Instrumentation, VLSI and embedded system designs, computer architecture and organization and computer based control of processes. Instrumentation engineers work for industries with

automated processes, such as chemical or manufacturing plants, with the goal of improving system productivity, reliability, safety, optimization and stability. They find jobs in various sectors including R&D units of public and private sector companies, heavy industries such as thermal power stations, steel plants, refineries, cement and fertilizer plants etc. like DRDO, ISRO, NTPC, DVC, SAIL, TATA Steel, Jindal Group of Industries, GAIL, IOCL, HPCL, BHEL, WBTL. They have a multidisciplinary role to play. One may choose to move sideways into other areas like Software (IBM, Infosys, TCS, CTS, and Capgemini etc.), Banking (SBI, UBI etc.), Education (Different degree & Diploma Engineering Institutions), and Biomedical Instrumentation etc. Biomedical Engineering under EIE Dept. has excellent job prospects as demand for sophisticated medical devices has been increasing. This branch also deals with developing and manufacturing medical equipment, diagnostic devices. The department also encourages students to engage in different extra-curricular & co-curricular activities to develop personal & professional ethics and management.

HOD Message

The department of AEIE was established with the vision to create technical professionals who are keen to take engineering responsibilities with a vast knowledge of entire process, medical instrumentation and power plants – a specialization that has grown leaps and bounds in the recent years. The department is equipped with state of the art laboratories to impart technical skill to the students to make them proficient engineers. The department also encourages students to engage in different extra-curricular & co-curricular activities to develop personal & professional ethics and management.

Mrs. Bapita Roy

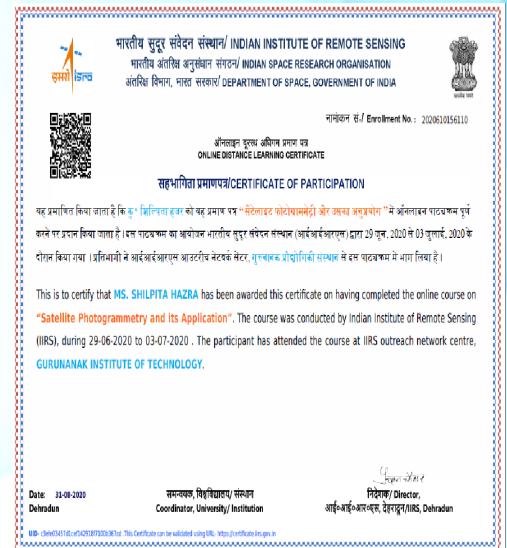
HOD

Electronics and Instrumentation

Departmental achievements:

Student's achievements:

Shilpita Hazra, Sampreet Dey, Shakya Mridhya selected for regional round for 4th AICTE-Chhatra Vishwakarma Awards 2020 under the guidance of Ms. Bapita Roy, H.O.D., AEIE and also participated in that on 31st March 2021.





Soumyajit Dutta got certificate of appreciation from Internshala for attending Online Internship Talk, an initiative to create awareness about meaningful internships, on the topic "How to gain experience and pocket money in this COVID-19 situation"

Shilpita Hazra successfully completed 'Satellite Photogrammetry and its application' from 29th June to 5th July 2020, IIRS/ ISRO outreach program



Soumyajit Dutta has been selected as a college ambassador of the Entrepreneurship Cell, IIT Bombay for the session 2019-2020

- * Soumyajit Dutta Winners in Technical debate in the tech fest "Tech Rápida" by department of IT, GNIT, on 4th December 2020
- * Soumyajit Dutta won 2nd prize in Essay competition held on 8th October 2020 on the topic "Women in Action during COVID 19 Pandemic" by WGRC of GNIT

- * Aishik Dutta, Arpan Kumar Lahiri, Kanhaiya Sah, Shovan Kar, Reparha Saha was awarded for Highest DGPA Owner 2020 batch ,2019 batch, 2018 batch, 2017 batch & 2016 batch accordingly at JIS Samman-2021
- * Shovan Kar was awarded as COLLEGE BLUE 2017 at JIS Samman-2021
- * Tanmoy Kumar Roy was awarded for highest publication from Institute in the year of 2018 at JIS Samman-2021
- * Arpan Kumar Lahiri was awarded for highest publication from Institute in the year of 2019 at JIS Samman-2021
- * Souvik Das was awarded for highest publication from Institute in the year of 2016 at JIS Samman-2021
- * Reparha Saha was awarded for highest publication from Institute in the year of 2016 at JIS Samman-2021
- * Shovan Kar was awarded for highest publication from Institute in the year of 2017 at JIS Samman-2021
- * Shilpita Hazra , Sayani Dey and Sonali Das were awarded for highest publication from Institute in the year of 2020 at JIS Samman-2021
- * Soumyajit Dutta is awarded the Certificate for the successful completion of “The Fundamentals of Digital Marketing Certification Examination” organized by Google Digital Unlock
- * Shilpita Hazra was Successfully completed NPTEL online certification on The Joy of Computing using Python with Elite Category
- * Tathagata Chatterjee got KRITI Award as departmental Topers in the AY 2020-21 (YGPA) from 2021 batch
- * Shilpita Hazra got KRITI Award as departmental Topers from 7th Sem AY 2020-21
- * Saikat Kundu got KRITI Award as departmental Topers from 5th Sem AY 2020-21

- * 20. Subhajit Kr Hooi got KRITI Award as Top Student in terms of DGPA only for 2021 passout batch
- * Shilpita Hazra , Sakya Mridha, Sampreet Dey won 1st position in Ideathon : Model Display competition , IE students Conclave 2k21, Organized by GNIT in association with IE. They demonstrated a prototype on “Smart Economical Irrigation With Rain Water Harvesting And Air Pollution Control And Monitoring System For Rural And Industrial Area”

***Faculty's achievements:**

- * Dr. Paramita Banerjee successfully completed NPTEL online certification on Digital Circuits in Elite + Silver category
- * Dr. Paramita Banerjee enrolled in Microprocessor and Microcontroller in NPTEL course
- * Dr. Paramita Banerjee selected as a reviewer for IEEE SENSORS 2020.
- * Dr. Paramita Banerjee selected as Faculty with highest number of publication- Only Indexed Journal will be considered at JIS Samman-2021
- * Dr. Paramita Banerjee selected as MOOC Course Developer: Subject Matter Expert Group (SMEG) of Nikhil Bharat Council for Massive Open Online Course. Objective: NBC-MOOC Free of Cost Training for Students for Socio - Economic Development.
- * Bapita Roy acted as the Coordinator of IIRS/ ISRO outreach network being the representative of GNIT (Network Institute of IIRS) and participate in the conduction of the Course ‘Satellite Photogrammetry and its application’ from 29th June to 5th July 2020. Two students under her mentorship qualified this course with a good marks in all India basis.
- * Bapita Roy acted as the Coordinator of IIRS/ ISRO outreach network being the representative of GNIT (Network Institute of IIRS) and participate in the conduction of the Course RS and GIS application" from 5th to 9th Nov 2020

- *Bapita Roy completed NPTEL Course on “Introduction to Internet of Things”
- *Bapita Roy is selected as Faculty with highest no. of Students Publication from department at JIS Samman-2021
- *Bapita Roy is selected as Best Video Lectures from Department at JIS Samman-2021
- *Bapita Roy is selected as MOOC Course Developer: Member of Subject Matter Expert Group(SMEG) of Nikhil Bharat Council for Massive Open Online Course.
- *Program Designed:: Industrial Instrumentation: Pressure & Flow measurement
- *Bapita Roy is awarded Kriti 2021 for:
 - *the AICTE-AQIS grant for STTP (four phases) on “Green IoT for Green Environment”
 - *Acted as the Coordinator of IIRS/ ISRO outreach network being the representative of GNIT (Network Institute of IIRS) and participate in the conduction of the Course ‘Satellite Photogrammetry and its application”. Two students under her mentorship qualified this course with a good marks in all India basis.
- *Completed NPTEL Course on “Introduction to Internet of Things” with Elite
- *Published Patent “Agro photovoltaic system (APV) – A promising solution of land Employment along with the Renewable Energy provided by the Agricultural Division” published
- *Dr. Adhish Kr. Chakrabarty is selected as a reviewer by International Journal of Robust and Nonlinear Control (an SCI-indexed journal published by Willy)
- *Dr. Adhish Kr. Chakrabarty is selected as faculty with maximum no. of Patents from the Institute at JIS Samman-2021
- *Dr. Adhish Kr. Chakrabarty is selected as Best Video Lectures from Department at JIS Samman-2021
- *Dr. Adhish Kr. Chakrabarty is awarded Kriti 2021 for:
 - *Patent “Dual Condenser Distillation System” granted
 - *Selected as a reviewer by International Journal of Robust and Nonlinear Control (an SCI-indexed journal published by Willy)

- *Suparna Maity is enrolled for PhD program in the department of Electronics & Instrumentation Engineering at National Institute of Technology, Silchar
- *Suparna Maity is MOOC Course Developer: Member of Subject Matter Expert Group(SMEG) of Nikhil Bharat Council for Massive Open Online Course.
- *Program Designed: Essentials of Process Control Part 1
- *Suparna Maity is awarded Kriti 2021 for:
 - *Published Patent on “System Identification and Modelling Approach to Identify Diseases using EMG signal Classification” published
 - *Completed NPTEL Course on “Introduction to Internet of Things” with Elite
- *Santana Das is MOOC Course Developer: Subject Matter Expert Group(SMEG) of Nikhil Bharat Council for Massive Open Online Course. Objective: NBC-MOOC Free of Cost Training for Students for Socio - Economic Development.
- *Program Designed: Essentials of Control System: Part1
- *Santana Das is awarded Kriti by GNIT for the extensive effort as the OIC under MAKAUT



A Webinar on "Different Measurement Systems in Instrumentation " organized by AEIE Department on 3rd September where Dr. Paramita Banerjee, Assistant Professor, AEIE, GNIT delivered lecture.

A Webinar on " Circuit Theory-An Elemental Part of Instrumentation Engineering

" organized by AEIE Department on 3rd September ,2020 where Mrs. Suparna Maity, Assistant Professor, AEIE, GNIT delivered lecture.

The graphic is a dark blue rectangular box with white and yellow text. At the top left is the GNIT logo, and at the top right is the JIS Group Educational Initiatives logo. The main text reads: 'A SERIES OF WEBINARS ON DIFFERENT ERA OF INSTRUMENTATION ENGINEERING ORGANISED BY: IE STUDENT CHAPTER, DEPT. OF APPLIED ELECTRONICS & INSTRUMENTATION ENGINEERING GURU NANAK INSTITUTE OF TECHNOLOGY SPEAKERS: FACULTY MEMBERS OF DEPT. OF APPLIED ELECTRONICS & INSTRUMENTATION ENGG. DURING 31ST AUGUST 2020 TO 4TH SEPTEMBER 2020'. At the bottom, there is a row of logos for various organizations including IIT, MHRD's Innovation Cell, Institution's Innovation Council, and Perfectice.

A Webinar on " Road to Better Employability" organised by AEIE dept, GNIT " organized by AEIE Department on 12th december, 2020 where Dr. Adhish Kumar Chakrabarty , Assistant Professor, AEIE, GNIT delivered lecture.

An Alumni Talk on "Sonomyography: Restoring Human Movement Through Sound" organised by AEIE dept, GNIT " organized by AEIE Department on 12th September ,2020 where Dr. Biswarup Mukherjee, Assistant Professor, ,Centre for Biomedical Engineering, IIT Delhi, Department of Biomedical Engineering, and AIIMS Delhi delivered lecture

An Alumni Talk on "Motivational speech " organized by AEIE Department on 21st November ,2020 where Mr. Bikash Dutta , Tech Mahindra, Senior Software Engineer delivered lecture

An Online training & Admission Drive program on "Practical Hands - on

in Automation, IoT and Sensor Applications through Virtual lab experiments”, organized by AEIE Department on 16th October ,2020



An Online Staff Development Prog on MATLAB and Simulink, organized by AEIE Department on 23rd Nov 2020 & 3rd Dec 2020 .

A FDP on Python & IoT, organized by AEIE & CA department from 14th to 18th December 2020 where faculty Develop Program will impart the knowledge on Python and IoT and they will be acquainted with the present industry

An Online Inter College Technical Model Competition, organized by AEIE Department on 16th October ,2020 from 17th to 22nd February ,2021

An Intra-college Debate Competition, organized by AEIE Department on 12th March ,2021 from 17th to 22nd February ,2021

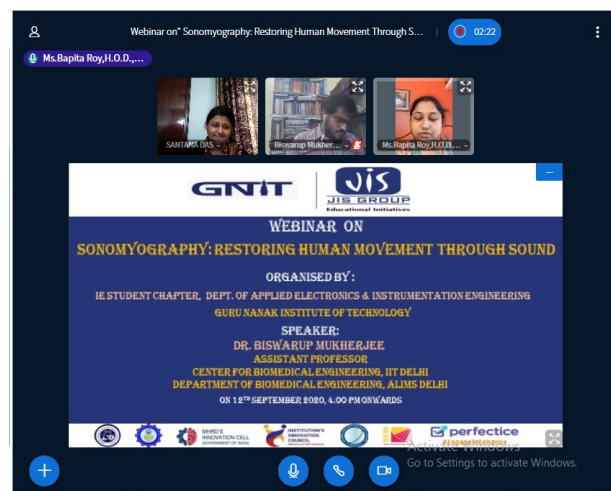
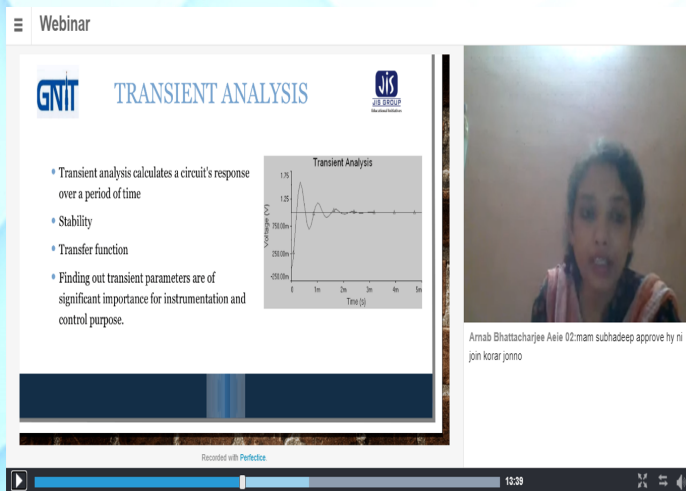
An Online Mock technical aptitude Test , , organized by AEIE Department on 8th April ,2021 for final year students of AEIE

A Hands on Training on Circuit Simulation organized by AEIE Department on 21st May & 22nd May ,2021

An Online Newsletters: “AEIE Shines” organized by AEIE Department for July to December 2020

A webinar on “Robotics for Better Life” organized by AEIE Department on 18.06.2021(Admission Drive Program)





A webinar on IoT for School Students organized by AEIE Department On 11.06.2021(Admission Drive Program)

International Webinar On “Way To Start Entrepreneurship Journey & Find vc Funding Opportunity For Early Stage Entrepreneurs where Dr. Biswarup Ghosh , Senior Research Investigator at University of Pennsylvania in Philadelphia, Adjunct Professor at Thomas Jefferson University East Falls Campus deliver lecture on 19 th June,2021

GNIT Lockdown Special Edition Newsletter - AEIE SHINES Third Edition

Message from HOD: Nothing was ever achieved in any field without hard work and dedication. We hope that students of the department of Applied Electronics and Instrumentation Engineering are finding this virtual edition as a source of information and inspiration. We are glad to see that students are actively participating in the various activities and projects. We are proud of the achievements of our students and staff. We are looking forward to a bright future for our department and our students.

Message from Principal: Life has continued for us since after the lockdown. GNIT has not witnessed any shortage of learning materials in the Dept. of Applied Electronics and Instrumentation (AEI) is going to publish the Special Edition newsletter. AEI is providing a platform for students to share their experiences and achievements. We are proud of the achievements of our students and staff. We are looking forward to a bright future for our department and our students.

Stay Safe... Stay at Home...

Mrs. Bapita Roy, Head, Dept. of AEIE, GNIT

1. A. WEBINAR	NAME OF THE ACTIVITY	DATE OF THE EVENT	A BRIEF NOTE REGARDING THE EVENT	TYPE OF PARTICIPANTS	TOTAL NO. OF PARTICIPANTS INVOLVED	REMARKS (IF ANY)
WEBINAR ON "USEFULNESS OF MICROBILLS IN ECONOMY"		18/07/2020 (FROM 11:00AM)	REPORTS ATTACHED BELOW	STUDENTS FROM DIFFERENT DEPARTMENTS OF GNIT, ALL THE FACULTY MEMBERS AND 3 SENIOR ASSISTANTS OF AEIE DEPARTMENT.	115	

GNIT Practical Hands-on in Automation, IoT and Sensor Applications

through **Virtual Lab Experiments on 16th Oct, 2020: 11 AM onwards**
For 10+2 Science Students
Organised by Department of Electronics and Instrumentation Engineering

The earlier world of Electronics, Instruments and Controls ... is now on Computers

Events:

1. Inauguration
2. Practical Hands-on in Automation, IoT and Sensor Applications through Virtual Lab Experiments
3. Virtual Tour of Different laboratories
4. Briefing of AMPAI Examination

Contact:
Mrs. S. Maity - 9432970012 | Mrs. B. Roy - 9231893138

Scan the QR code below to Register for **Free**

Seminar/workshop/ training/ FDP Participated by

i)faculty & staff:

- * Ms. Bapita Roy attended webinar on Upskilling / reskilling - strategy to sustain competitiveness in digital economy on 15.7.20, organized by GNIT
- * Ms. Bapita Roy attended Webinar on "What may be the Best Assessment Approach for Higher Education Institutions - Online or Offline?" on 30.7.20, organized by ASSOCHAM INDIA
- * Ms. Bapita Roy attended webinar on "Webinar on Dynamic Shift in Dissemination of Education for the future" on 30.7.20, organized by ABP Education
- * Ms. Bapita Roy attended Webinar on "Webinar on "Machine Learning and Steganography"
- * " On 04-08-2020, organized by Department of Computer Science and BCA, Kharagpur College
- * Ms. Bapita Roy attended webinar on "Importance of Electrical Energy Audit Confirmation" on 24-08-2020, organized by Hoiki India Pvt.Ltd
- * Ms. Bapita Roy attended Webinar on "Tomorrow's Tech for Tomorrow's Careers: Big Data, AI, IoT and ML" on 01.09.20, organized by ABP education
- * Ms. Bapita Roy attended webinar on" Western Region Presents Techno-Intelligence e-Conclave 2020 Confirmation" by ASSOCHAM On 10.9.21
- * Ms. Bapita Roy attended Webinar-based workshop on "Increase the employability of graduates" organised by AICTE on 5.11.21
- * Ms. Bapita Roy attended Webinar on " The art of creating instructional videos" on 6.11.20 by JIS group
- * Ms. Bapita Roy attended webinar on "AI Transformation in Higher Education: Significance of Personalized Learning" on 10.11.20 by ASSOCHAM
- * Ms. Bapita Roy attended One Week Online Workshop on "Intellectual Property Rights and Entrepreneurship Development (IPRED-2020)" organized by NIT Silchar from 1.9.20.to 5.9.20
- * Ms. Bapita Roy attended webinar on Introduction to Inner Engineering on

29.12.20, organized by Isha Foundation in collaboration with GNIT

* Ms. Bapita Roy attended Workshop on Entrepreneurship Development Phases in the Next Normal on 9.12.20 organized by FT department, GNIT

* Ms. Bapita Roy attended webinar on "AI Transformation in Higher Education: Role of Faculty in Institutionalizing AI Technology on 20.01.21, organized by ASSOCHAM

* Dr. Paramita Banerjee attended webinar on Upskilling / reskilling - strategy to sustain competitiveness in digital economy on 15.7.20, organized by GNIT

* Dr. Paramita Banerjee attended Webinar on "What may be the Best Assessment Approach for Higher Education Institutions - Online or Offline?" on 30.7.20, organized by ASSOCHAM INDIA

* Dr. Paramita Banerjee attended webinar on "Webinar on Dynamic Shift in Dissemination of Education for the future" on 30.7.20, organized by ABP Education

* Dr. Paramita Banerjee attended Webinar on "Webinar on "Machine Learning and Steganography" on 04-08-2020, organized by Department of Computer Science and BCA, Kharagpur College

* Dr. Paramita Banerjee attended webinar on "Importance of Electrical Energy Audit Confirmation" on 24-08-2020, organized by Hoiki India Pvt.Ltd

* Dr. Paramita Banerjee attended webinar on " Webinar on Hioki Test Solution for Green Energy"

* " on 27-08-2020, organized by Hoiki India Pvt.Ltd

* Dr. Paramita Banerjee attended webinar on " "Local Drug delivery to the Injured Cervical Spinal Cord using Engineered Hydrogel Preserves Diaphragm Function"" on 27-08-2020, organized by Hoiki India Pvt.Ltd

* Dr. Paramita Banerjee attended Webinar on Investors Protection, Education & Awareness - The Way Forward" on 8-09-2020, organized by ABP Education

* Dr. Paramita Banerjee attended AICTE-AQIS- STTP Phase 1 on "Gren IOT for Green Environment" from 19.4.21 to 24.4.21, organized by AICTE-AQIS

* Dr. Paramita Banerjee attended webinar on "Importance of Electrical Energy Audit Confirmation" on 24-08-2020, organized by Hoiki India Pvt.Ltd

- * Ms. Santana Das attended webinar on Looking to the Future of Passive Components organized by KEMET COMMUNICATION, USA on 01-07-2020
- * Ms. Santana Das attended webinar on “3 years of GST: Key open legal issues & points arising out of the COVID scenario” on 02-07-2020, organized by ASSOCHAM, INDIA
- * Ms. Santana Das attended webinar on "Designing In Passives for Uninterruptible Power Supplies" organized by KEMET COMMUNICATION, USA on 06-07-2020
- * Ms. Santana Das attended webinar on "Quest for Ph.D. - Research Matter" on 13-07-2020, organized by Alumni Association in collaboration with IIC - GNIT & MHRD
- * Ms. Santana Das attended webinar on Power Conversion from AC Mains to Device - organized by KEMET COMMUNICATION, USA on 13-07-2020
- * Ms. Santana Das attended Digital Transformation of Higher Education & preparing students for future job skills on 15-07-2020
- * Ms. Santana Das attended Leadership talk of Dr. Abhay Jere, MHRD, AICTE with Shri Anand Mahindra, Chairman Mahindra group on 18-07-2020 organized by MHRD, AICTE
- * Ms. Santana Das attended the webinar on the topic Atmanirbhar Bharat – Role of Higher Education Institutions on 20-07-2020 organized by ASSOCHAM
- * Ms. Santana Das attended webinar on SELF RELIANCE AND NATIONAL SECURITY EMERGING IMPERATIVE on 22-07-2020 organized by Institute of Engineers
- * Ms. Santana Das attended Leadership talk of Dr. Abhay jere , chief Executive officer , IIC, MHRD with Leadership Talk with Ms. Shradha Sharma, Founder and CEO YourStory Media on 25-07-2020 organized by IIC, MHRD
- * Ms. Santana Das attended the webinar on "Webinar on Annual Pump Performance Test for Fire Pumps" on 04-08-2020 organized by ASSOCHAM
- * Ms. Santana Das attended the MOLECULAR BIOLOGY WEBINAR: Molecular basis of regulation of transcription by second messenger ppGpp on 06-08-2020 organized by Sathyabama Institute of Science and Technology, Chennai

- * Ms. Santana Das attended the webinar on Illness to Wellness- Building Immunity Through Nutritious Food During COVID 19 on 07-08-2020 organized by ASSOCHAM, INDIA
- * Ms. Santana Das attended webinar on MINDISK - Let's PROGRAM a peaceful mind on 08-08-2020 organized by Techno India Education
- * Ms. Santana Das attended the webinar on- "Online Education: Is an e-learning degree as valuable as a traditional degree?" on 17-08-2020 organized by ABP Education
- * Ms. Santana Das attended webinar on the topic Computer Science, Computer Applications and IT organized by ABP Education on 19-08-2020 organized by ABP Education
- * Ms. Santana Das attended Drones in Mineral Exploration: Analyzing its applications and integration" on 24-08-2020 organized by ASSOCHAM, India
- * Ms. Santana Das attended How Technology is Changing Careers in Finance: Fintech, Block chain and more on 25-08-2020 organized by ABP Education
- * Ms. Santana Das attended Online National Summit HOUSING FOR ALL - AFFORDABLE AND RENTAL HOUSING: THE WAY FORWARD on 26-08-2020 organized by ASSOCHAM, India
- * Ms. Santana Das attended "New Education Policy 2020 - Knowledge Series Transforming Higher Education: Structure and Processes" on 27-08-2020 organized by ASSOCHAM, India
- * Ms. Santana Das attended National Vice Chancellors' Round Table: Three Emerging Careers starts On 28-08-2020 organized by ABP Education
- * Ms. Santana Das attended Low power VLSI on 29-08-2020 organized by K.S.R College of Engineering, Tiruchengode
- * Ms. Santana Das attended "sonomyography: Restoring Human Movement Through Sound " on
12-09-2020 organized by AEIE, GNIT
- * Ms. Santana Das attended Moving towards a Green and Sustainable Nation, on 19-09-2020 organized by ASSOCHAM, INDIA
- * Ms. Santana Das attended webinar on "Engineering Business Incubation &

Entrepreneurship" on

- * organized by National Skill Development Forum of IET
- * Ms. Santana Das attended webinar on "The Art of Creating Instructional Videos" on 06-11-2020
- * organized by JIS group
- * Ms. Santana Das attended webinar on Designing Drug for Coronavirus on 12-11-2020
- * Ms. Suparna Maity attended Webinar on "Tomorrow's Tech for Tomorrow's Careers: Big Data, AI, IoT and ML" on 01.09.20 organized by ABP education
- * Ms. Suparna Maity attended webinar on "Western Region Presents Techno-Intelligence e-Conclave 2020 Confirmation" by ASSOCHAM on 10.09.20 organized by ASSOCHAM
- * Ms. Suparna Maity attended webinar -based workshop on "Increase the employability of graduates" organised by AICTE on 05.11.20
- * Ms. Suparna Maity attended webinar on "The art of creating instructional videos" on 06.11.20
- * organised by JIS Group
- * Ms. Suparna Maity attended webinar on "AI Transformation in Higher Education: Significance of Personalized Learning" on 10.11.20 organised by ASSOCHAM
- * Ms. Suparna Maity attended One Week Online Workshop on "Intellectual Property Rights and Entrepreneurship Development (IPRED-2020)" organized by NIT Silchar from 01.09.20 to 05.09.20
- * Ms. Suparna Maity attended webinar on Introduction to Inner Engineering on 29.12.20 organised by Isha Foundation in collaboration with GNIT
- * Ms. Suparna Maity attended webinar on "Road to Better Employability" organised by AEIE dept, GNIT on 12.12.20
- * Ms. Suparna Maity attended Workshop on Entrepreneurship Development Phases in the Next Normal on 9.12.20 organized by FT department,GNIT

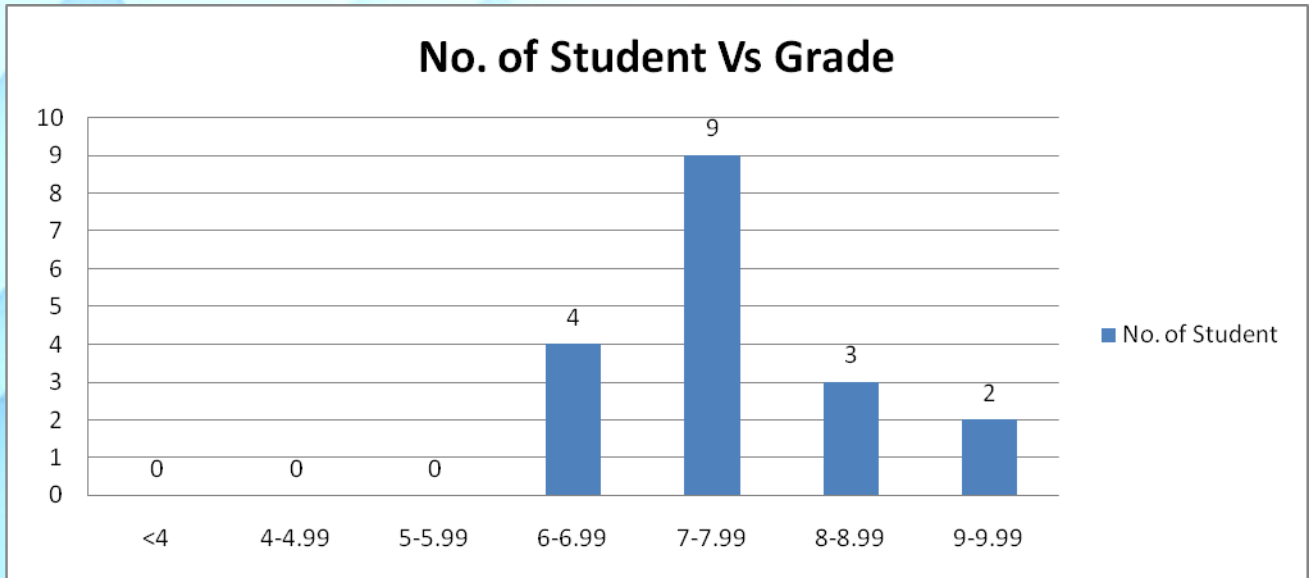
- * Ms. Suparna Maity attended webinar on "AI Transformation in Higher Education: Role of Faculty in Institutionalising AI Technology on 20.01.21 organized by ASSOCHAM
- * Ms. Suparna Maity attended AICTE-ISTE sponsored refresher program on "Engineering Applications of Optimization" organised by Department of Automobile Engineering, Rajiv Gandhi Govt. Polytechnic, Department of Education, Itanagar-791113, Arunachal Pradesh from 05.04.21 to 10.04.21 organized by AICTE-ISTE
- * Ms. Suparna Maity attended AICTE-AQIS- STTP Phase 1 on "Green IOT for Green Environment"
- * From 19.04.2021 to 24.04.2021 organized by AICTE-AQIS
- * Technical staff: Ms. Saswati Chatterjee, Ms. Nabamita Paul & Mr. Mrinmoy Dutta :
 - * attended a Webinar on IoT its applications on 07/07/20 organized by
 - * CSE GNIT
 - * attended a webinar on "Upskilling / reskilling - strategy to sustain competitiveness in digital economy" on 15/07/20 organized by AEIE Department.
 - * attended a webinar on Aatmanirbhar Bharat Role of Higher Education Institutions on 20/07/20 organized by ASSOCHAM India
 - * attended a Webinar on "SELF RELIANCE AND NATIONAL SECURITY EMERGING IMPERATIVES" on 22/07/20 organized by IEI HQ
 - * attended a Webinar by Dr. Abhijit Chowdhury on COVID 19 On 05/08/20 organized by JIS group
 - * attended a Webinar on "The Current Global Crisis & Food Safety" On 07/08/20 cMitra SK Pvt. Ltd.
 - * attended a FDP: Tracing the contours of new normal :Post Covid -19 From 11/08/20 to 16/08/20 organized by ASHU & FT
 - * attended a Webinar on "Bengal Education Leaders' Summit with education minister Partha Chatterjee: Is Higher Education in Bengal today geared for Ca-

reers of Tomorrow?" On 12/08/20 organized by ABP Education

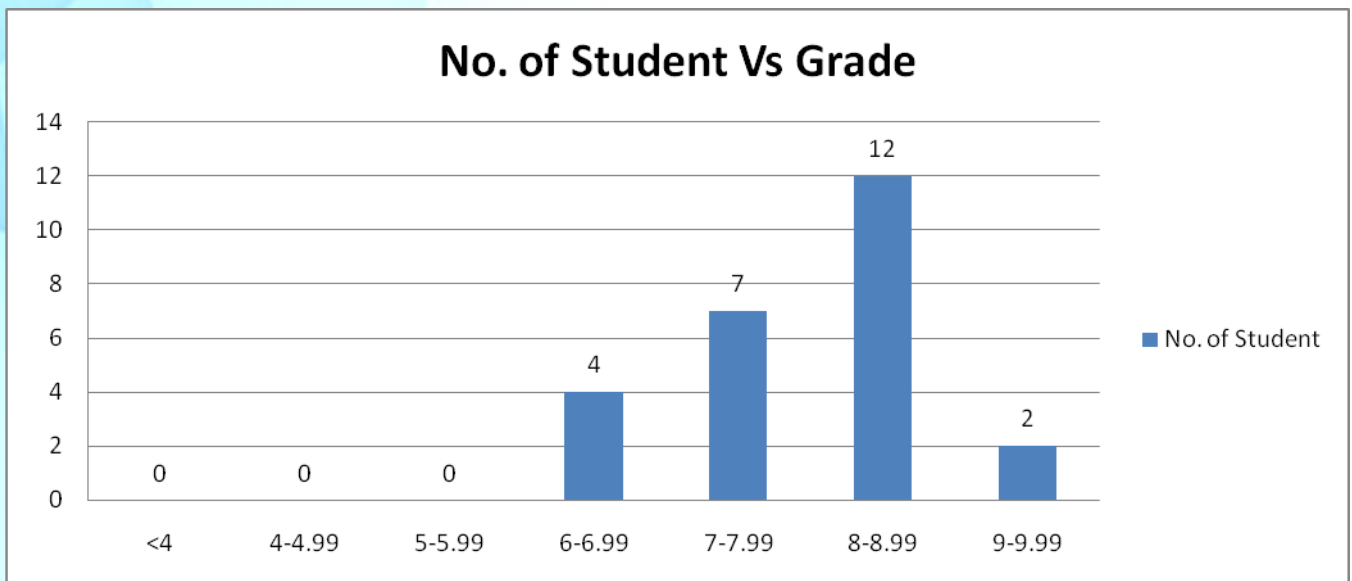
- * attended a Webinar on Hioki test solution for Green Energy on 16.08.2020 organized by Hioki test solution
- * attended a webinar on the 'National Education Policy 2020' on 17.08.2020 organized by FICCI
- * attended a Webinar on Data Science and Artificial Intelligence: Revolutions for Present and Future on 22.08.2020 organized by The Neotia University (TNU), Kolkata
- * attended a webinar on Role of Private Equity during Pandemic: Challenges & Opportunities starts in 1 Hour on 25/08/20 organized by ASSOCHAM INDIA
- * attended a International Webinar on "Local Drug delivery to the Injured Cervical Spinal Cord using Engineered Hydrogel Preserves Diaphragm Function" on 27/08/20 organized by AEIE Department
- * attended a Webinar on e-counselling on 27/08/20 organized by ABP education
- * attended a Webinar: "Energy Performance Contracting (EPC): India's Economy Booster Post COVID19" on 28/08/20 organized by ASSOCHAM India
- * attended a AICTE Sponsored Short Term Training Programme (Phase-II) on "Recent Trends in Internet of Things (IoT) and Embedded System Based Monitoring and Control of Distributed Generation." from 24/08/20 to 29/09/20 organized by AICTE
- * attended a Webinar: Energy Audits in Mixed Use Buildings on 09/09/20 organized by HOIKI
- * attended a webinar on " Sonomyography: Restoring Human Movement Through Sound" on 12/09/20 organized by AEIE Department
- * attended a webinar-based workshop on 'Employability of graduates. On 5/11/20
- * attended a Webinar on "Embedded systems and Robotics" on 25/11//20
- * organized by AEIE Department

Result Analysis

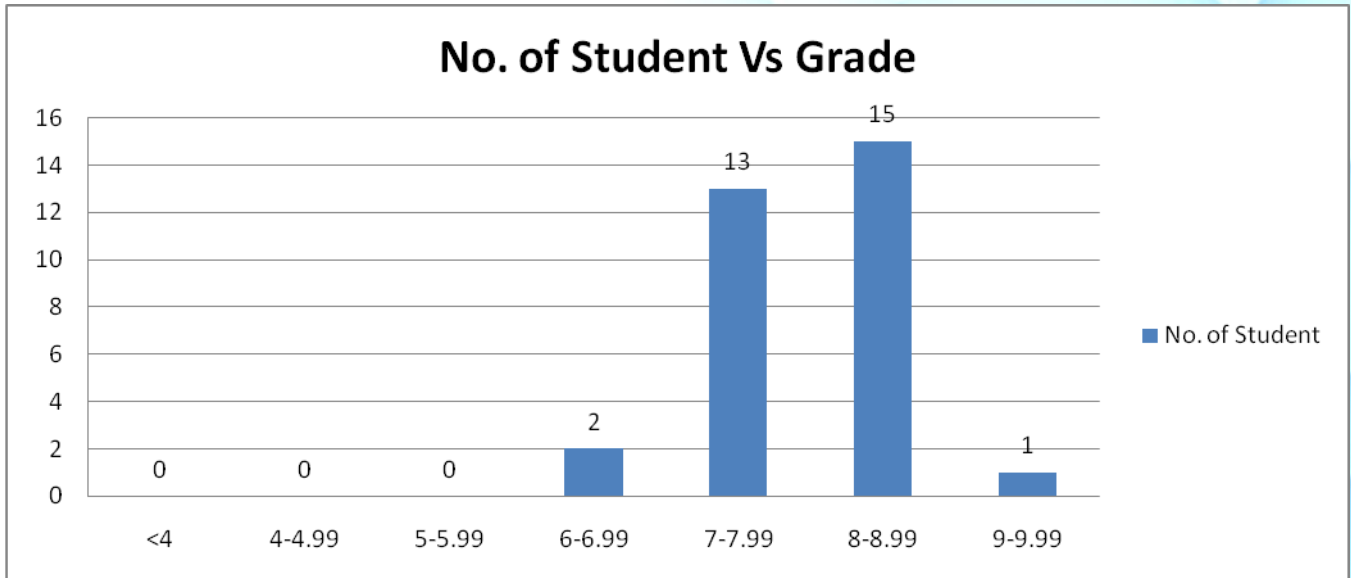
SGPA WISE RESULT ANALYSIS (CSE) AY 2020-21 3rd Semester



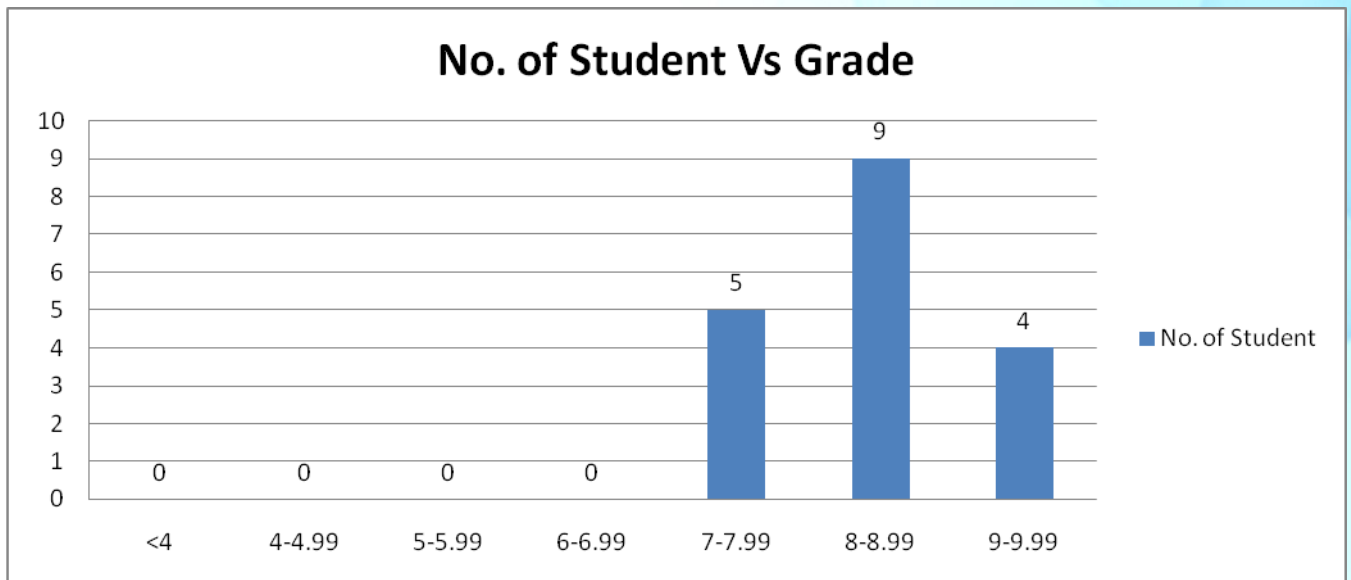
SGPA WISE RESULT ANALYSIS (CSE) AY 2020-21 5th Semester



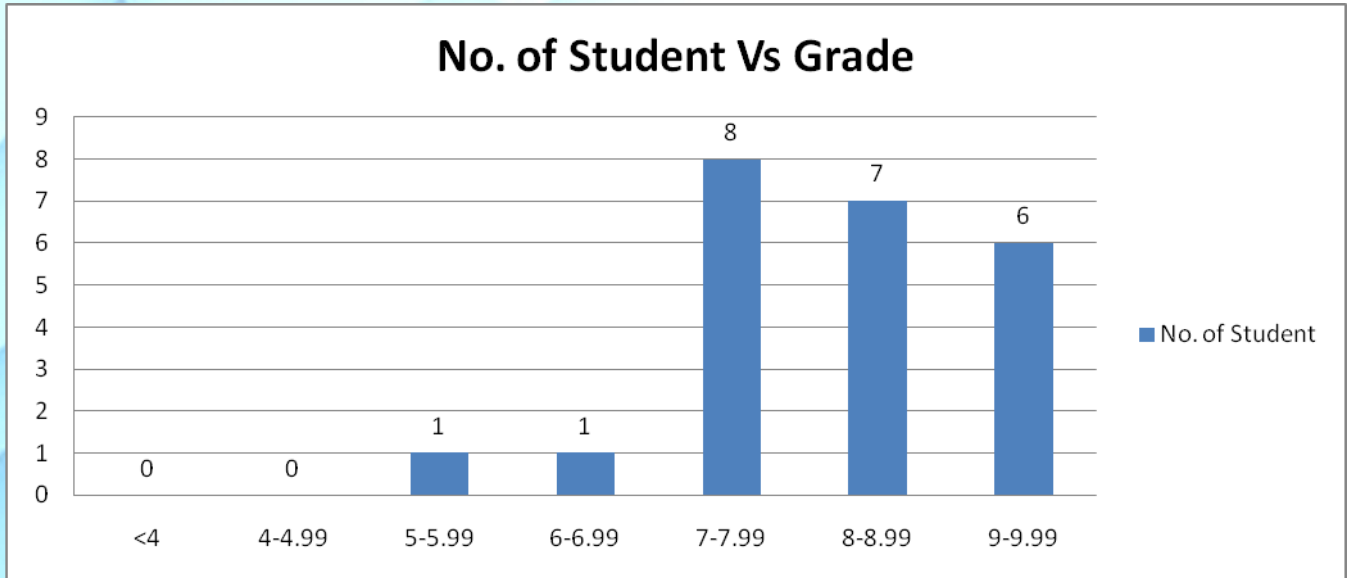
SGPA WISE RESULT ANALYSIS (CSE) AY 2020-21 7th Semester



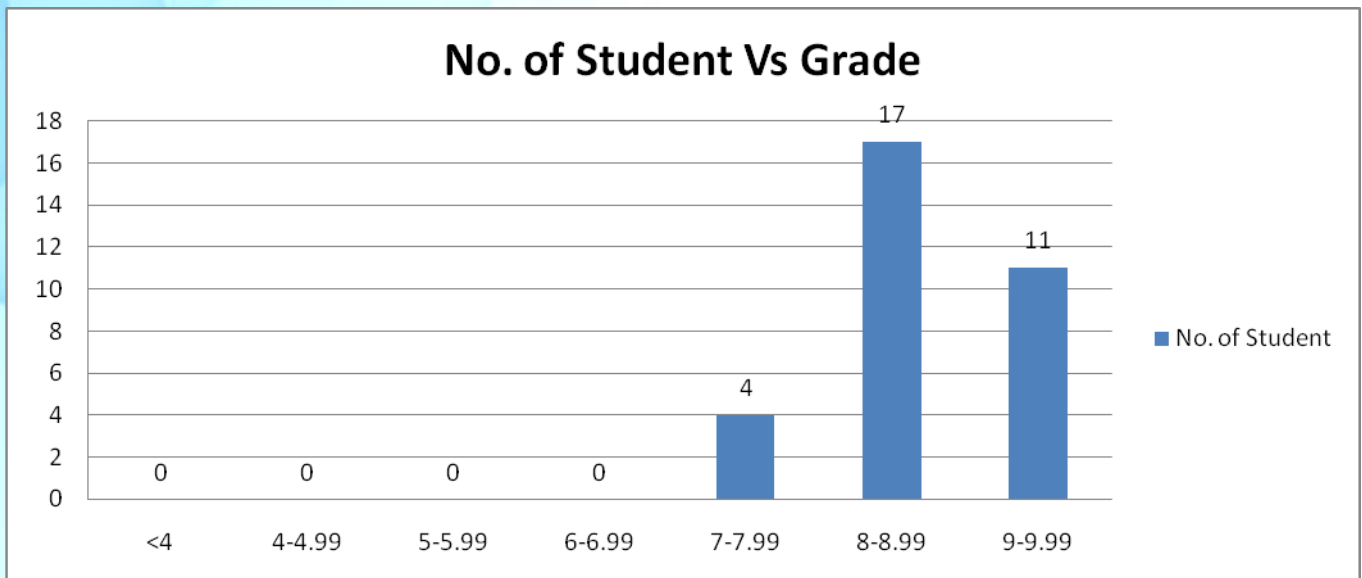
SGPA WISE RESULT ANALYSIS (CSE) AY 2020-21 4th Semester



SGPA WISE RESULT ANALYSIS (CSE) AY 2020-21 6th Semester



SGPA WISE RESULT ANALYSIS (CSE) AY 2020-21 8th Semester



GURU NANAK INSTITUTE OF TECHNOLOGY

Department
of
Computer Applications

ANNUAL REPORT

2020-21

Department of Computer Applications

Name of the Department: Computer Application

Vision of the department

The Department of Computer Applications aims to produce technically competent, skilled IT professionals, researchers and entrepreneurs with the ability to apply their knowledge in IT industry, research & development or in entrepreneurial arena and they can meet the challenges in modern IT industry.

Mission of the department

- * To Ensure knowledge based academic environment in the department.
- * Provide a conducive teaching and learning atmosphere so as to achieve excellence in teaching-learning, research and development activities.
- * Enable the students to solve software related problems independently.
- * To bridge the gap between industry and academia by framing curricula and syllabi based on modern industrial and societal needs.
- * Mentoring the students with effective communications skills.
- * Counsel the students with best of social and ethical skills along with their inherent knowledge to gear up with their urges towards self- development and continuous improvement.
- * To ensure that the students are groomed in the society as a true human resource and successful professional.

PEO

PEO 1: To excel in professional career and higher education, research by acquiring knowledge and skills in core and allied domain for holistic development.

PEO 2: To produce successful professionals in industry, government, academic research, entrepreneurial pursuit and consulting firms

PEO 3: To develop the capability to analyze real life problems, design computing systems appropriate to its solutions that are technically sound, economically feasible and socially acceptable.

PEO 4: To exhibit professionalism with strong human values and professional ethics, team work in their profession and adapt modern trends by engaging in life long learning.

Program Outcomes

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

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



Program Specific Outcomes

PSO 1: Develop the ability to apply knowledge and skills to solve the real life problems.

PSO 2: Develop the ability to work in a team with the ability of leadership, analytical reasoning for problem solving, critical thinking and strong human values of a responsible professional.

PSO 3: Ability to enhance and develop techniques for independent and lifelong learning in computer application.

PSO 4: To acquire In-depth knowledge & sustained learning that leads to innovation and analyze the societal needs to provide novel solutions through technology based research

Brief Overview of the Department.

Department of Computer Applications is devoted to study and research. It runs MCA (under Autonomy) under MAKAUT. The combination of competent and vibrant faculty members, modern infrastructure and technical resources give an edge to the young technocrats.

HOD's Message.

The Department of Computer Applications started its journey in the year 2007 with MCA stream. We are fortunate to be the choice of most of the stake holders. The Department of CA believes in excellence in education and innovation. It gives best possible placement to students. Teacher-student relationship is a matter of pride for us. Different Seminars, Workshops, Webinars, Extra-curricular and Co-curricular activities are performed throughout the year. This helps the young minds grow in diverse dimensions beyond their academics. I wish all the success to each and every student and their very bright future.

Mr. Chiranjeeb Dutta

HOD

Computer Application

Departmental achievements

Student's achievements :

Rahul Dev Sarkar :

- * Speaker in International World camp Meet 2020 at Kathmandu, Nepal
- * Speaker in International World camp Meet 2019 at Dhaka, Bangladesh
- * Founder and CEO at Peergrowth Technologies, Kolkata

Department of Computer Applications

Kushal Saha :

Secured 3rd position in Rhythm Battle Solo Singing Competition in IRIS'19

Rahul Dev Sarkar :

Speaker in International World camp Meet 2019 at Kathmandu, Nepal Speaker in International World camp Meet 2019 at Dhaka, Bangladesh Founder and CEO at Peergrowth Technologies, Kolkata



Neha Vishwakarma :

Selected as Student Ambassador of Internshala from GNIT Got Elite certificate from NPTEL in Programming in C.

Shalini Acharya :

Secured 2nd position in "ANAKHRONOS" at Techno India

Amrik Ghosh :

Selected as ISP-20 and ISP-21 from GNIT by Internshala



Kumarjit Ghosh, Sharaya Biswas, Raj Pratim Banik, Koushik Roy, Amrik Ghosh :

They have participated in Workshop Series at IIT Kharagpur on Artificial Intelligence with Machine Learning.



Poushali Das:

Student of MCA, Recognized as writer of the Books (Bengali Literature) "Hasnuhana" and "Megha Mallar"

Department of Computer Applications

Dibyajyoti Mukherjee :

Student of MCA, Received certificate in Great Learning Quiz Competition.



Snigdha Sengupta :

Student of CA, Received certificate in Information security education awareness, project phase-2 quiz competition

Faculty's achievements :

Mr. Chiranjeeb Dutta :

SPOC for SWAYAM NPTEL LOCAL CHAPTER
MENTOR of NPTEL online courses

Successfully completed Mentorship of 37 students out of which 19 students scored more than 90% marks.

Received Appreciation letter from NPTEL.

Successfully completed Innovation Ambassador training (Advanced Level) conducted by MoE's Innovation Cell & AICTE



Department of Computer Applications

Mrs. Somalina Chowdhury :

PhD enrolled from MAKAUT (WBUT)

Submitted project idea "Nayya Bharat" in Idea-O-Meter. The Project got approval and funding

Successfully completed One week ATAL course on "Cyber Security and Cyber Forensics"

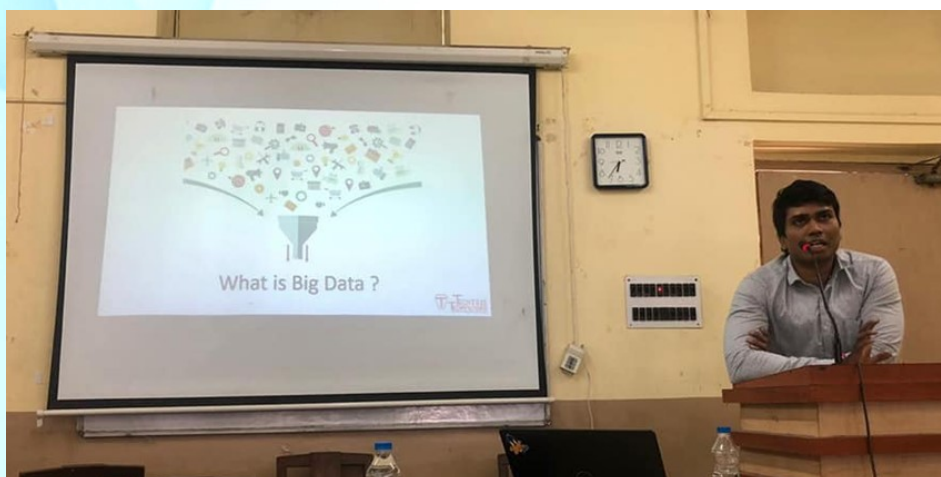
Successfully completed One week ATAL course on "IOT in 5G Technology"



Mrs. Dola Saha :

Submitted project idea "Online crime reporting system" in Idea-O-Meter. The Project got approval and funding.

Awarded with CERTIFICATE OF APPRECIATION IN ACADEMIC EXCELLENCE by Nikhil Bharat Siksha Parisad



Department of Computer Applications

Departmental events

Employability and Future Trend : Big Data” for students of MCA on 22.02.2020. Mr Abhisekh Ranjan Jha, Full Stack Developer, CTS, delivered his lecture on the topic.



Department of Computer Applications has organized a One Day Industry Expert Meet for students of MCA on 28.02.2020. Mr. Rajan Banerjee, Solution Engineer, SendBird Technologies, **Seoul, South Korea** delivered his lecture and interacted with students.

Webinar
on
Cyber Security & Ethical Hacking
for Pre-Final year students of BCA, GNIT
Organized by
Dept. of Computer Applications, GNIT
in collaboration with
Ardent Computech Pvt. Ltd, Kolkata
30/03/2020 (Monday)
11.00 am - 12.30 pm
Register by ONLINE
ETHICAL HACKING
Contact : 98745 64589

Webinar
on
PHP with Angular JS
for the Pre-Final year Students of BCA, GNIT
Organized by -
Dept. of Computer Applications
Guru Nanak Institute of Technology
Session : 1st April (Wednesday) 2020 @ 12.15pm
Register ONLINE before 10.00am, 1st April 2020
Registration link - <https://bit.ly/2UqsPZR>
Steps to join the Online Session -
1. Click the link and register for the online class.
2. Install the Application "GoToWebinar" from Google Play Store.
3. Session ID is " 623683995 ".
Contact :
Somalina Chowdhury, 98745 64589
TechTree Associate, 82500 61461

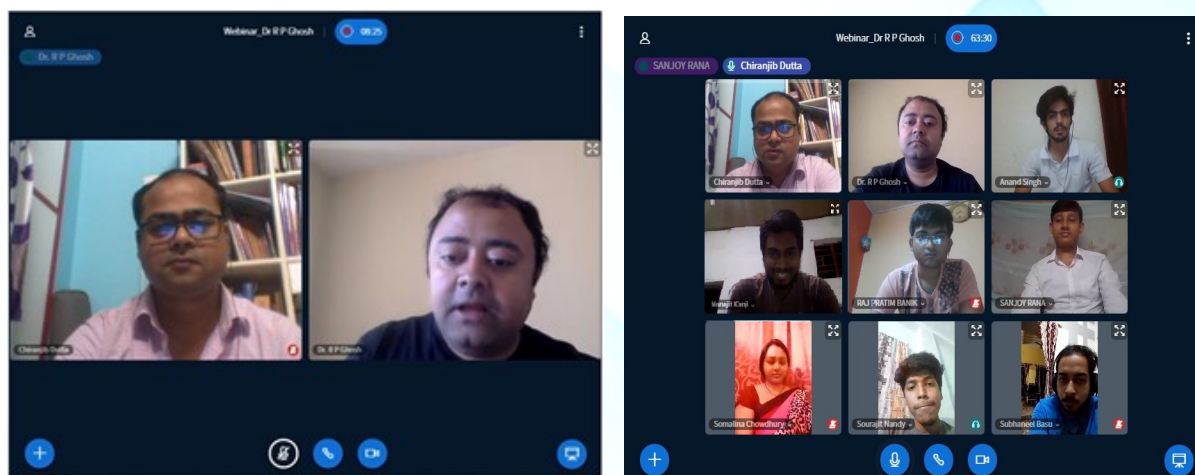


Department of Computer Applications has organized a One Day seminar on “Python with Machine Learning” for students of MCA on 04.03.2020. Mr Sanyanta Chakraborty from National Institute of Industrial Training, Kolkata, has delivered his lecture on the topic.



Department of Computer Applications has organized a One Day International Webinar on “Machine Learning for Beginners” for students of MCA on 22.04.2020. Dr Riddhi Pratim Ghosh, Post Doctoral Fellow, Dept of Statistics, University of Pennsylvania, Philadelphia, USA has delivered his lecture on the topic.

Department of Computer Applications



Department of Computer Applications has organized a One Day Industry Expert Meet for students of MCA on 12.05.2020. Technical experts from reputed companies of Kolkata participated in the program and represented their organizations like – ARDENT Computech Pvt. Ltd., TechTree Technologies, National Institute of Industrial Training, Micropro etc.

GNIT 100th Anniversary Logo MHRD'S INNOVATION CELL (GOVERNMENT OF INDIA) INSTITUTION'S INNOVATION COUNCIL (Ministry of HRD Initiatives) Solar Energy Society of India JIS GROUP Educational Initiatives

INDUSTRY EXPERT MEET
ON RECENT MARKET TRENDS & EMPLOYABILITY IN SOFTWARE INDUSTRY

Organized by
Department of Computer Applications
Guru Nanak Institute of Technology
for
Pre-final year Students of
BCA & MCA

Date:
12th May 2020

Time:
11.30 am - 1.00 pm

Contact : Dola Saha (98832 06685)

Department of Computer Applications and Department of Applied Electronics & Instrumentation Engineering has organized jointly a One Week Faculty Development Programme on “Python and IOT” on 14.12.2020 – 18.12.2020.

Prof. Indrajit Banerjee, IEST

Department of Computer Applications

Prof. Sunit Kumar Sen, CU

Dr. Himadri Nath Saha, CU

Dr. Arijit Ghosal, St. Thomas College of Engineering & Technology have delivered their lecture on the topic.

About The College

Guru Nanak Institute of Technology was instituted with a vision to empower the aspiring professionals with the technological knowledge and professional expertise under the aegis of JIS Group Educational Initiatives in the year 2003. This technical campus offers undergraduate and post graduate courses under Maulana Abul Kalam Azad University of Technology (formerly known as WBUT) and some courses are NBA Accredited. The Institute is approved by AICTE and accredited by UGC, NAAC and located in one of the prime locations in North Kolkata near Sodepur. The Institute offers latest technology oriented courses as per industry trends and nurtures creativity, innovations and research initiatives both at faculty and student levels to enhance the teaching learning process.

About The AEIE Department

The department of AEIE was established in the year 2003. The program is affiliated to Maulana Abul Kalam Azad University of Technology (formerly known as WBUT) and approved by All India Council for Technical Education (AICTE). This department emphasizes to create technical professionals who are keen to take engineering responsibilities with a vast knowledge of entire process, medical instrumentation and power plants – a specialization that has grown leaps and bounds in the recent years. The department is equipped with state of the art laboratories to impart technical skill to the students to make them proficient engineers. The department also encourages students to engage in different extra-curricular & co-curricular activities to develop personal & professional ethics and management. To create technical professionals who are keen to take engineering responsibilities with a vast knowledge of entire automation, Artificial Intelligence, IoT (Internet of Things), Robotics, process, medical instrumentation and power plants – a specialization that has grown leaps and bounds in the recent years.

About The CA Department

The Department of Computer Applications is devoted to study and research in applications of Computer Science at Under Graduate and Post Graduate levels. To bridge the wide chasm between computer theory and applications, Guru Nanak Institute of Technology, an educational initiative of JIS Group (a premier Educational Conglomerate in Eastern India) started Master in Computer Application (MCA) program in the year 2007. The program is affiliated to Maulana Abul Kalam Azad University of Technology (formerly known as WBUT) and approved by All India Council for Technical Education (AICTE). Bachelor of Computer Application (BCA) was started in 2008. The program is affiliated to Maulana Abul Kalam Azad University of Technology (formerly known as WBUT).

Chief Patron:

Sardar Taranjit Singh
Managing Director, JIS Group

Patron:

Mr. Simarpreet Singh
Director, JIS Group

FDP Chairperson:

Prof. (Dr.) Santanu Kr. Sen
Principal, GNIT

Convenors:

- 1. Mrs. Bapita Roy**
HOD, Department of Applied Electronics and Instrumentation Engineering, GNIT
- 2. Mr. Chiranjib Dutta**
HOD, Department of Computer Applications, GNIT

Joint Convenors:

- 1. Dr. Paramita Banerjee**
Asst. Prof., Dept of AEIE, 9903222889
- 2. Mrs. Somalina Chowdhury**
Asst. Prof., Dept of CA, 9874564589

Committee Members:

1. Mrs. Dola Saha, Dept of CA
2. Dr. Adhish Kr Chakrabarty, Dept of AEIE
3. Ms. Santana Das, Dept of AEIE
4. Ms. Suparna Maity, Dept of AEIE
5. Ms. Nabamita Paul, Dept of AEIE
6. Ms. Saswati Chatterjee, Dept of AEIE
7. Mr. Mrinmoy Dutta, Dept of AEIE

E-Mail : fdp.gnit@gmail.com



ONE WEEK
FACULTY DEVELOPMENT PROGRAMME
ON

"PYTHON AND IOT"

DATE: 14th - 18th DECEMBER 2020

Organized by -
**Department of Applied Electronics
& Instrumentation Engineering**
and
Department of Computer Applications

MODE : ONLINE



**Guru Nanak Institute
of Technology**
Address:
157/F, Nilgunj Road, Sodepur,
Kolkata-700 114, West Bengal

Department of Computer Applications has organized a Webinar on “Web design and development using PHP” for the students of 2nd year CA on 21.04.2021.

Mr Mahendra Dutta, Ardent Computech Pvt. Ltd. has delivered his lecture on this topic and interacted with students.

Department of Computer Applications

Department of Computer Applications has organized a Webinar on “Web design and development using PHP” for the students of 2nd year CA on 21.04.2021.

Mr Mahendra Dutta, Ardent Computech Pvt. Ltd. has delivered his lecture on this topic and interacted with students.



GNIT   **MHRD'S INNOVATION CELL**
(GOVERNMENT OF INDIA)  **JIS GROUP**
Educational Initiatives

Webinar
on
Web Design and Development using PHP

for the Second year students of BCA, GNIT

Organized by -
Dept. of Computer Applications
Guru Nanak Institute of Technology

Session : 21st April (Wednesday) 2021 @ 12.00 pm

Register ONLINE
Registration link -
<https://forms.gle/b6KpmjxFcXR3sJVR6>

Speaker:
Mr. Mahendra Dutta, Ardent Computech Pvt. Ltd.



Contact:
Mrs. Dola Saha, Asst. Prof., Dept. of CA, 98832 06685

Department of Computer Applications has organized a Webinar on “Web development using Python & Django” for the students of MCA on 23.04.2021.

Mr Deepayan Pal, Founder & Director of Sikharthy Infotech has delivered his

lecture on this topic and interacted with students.



Webinar on **Web Development using Python & Django**

for the BCA & MCA students of GNIT

Organized by -

**Dept. of Computer Applications
Guru Nanak Institute of Technology**

Session : 23rd April (Friday) 2021 @ 2.00 pm

Register ONLINE

Registration link -

<https://forms.gle/3WSMSV9dE8GqWtMz7>

Speaker:

Mr. Deepayan Pal, Founder and Director, Sikharthy Infotech Pvt. Ltd.



Contact:

Mrs. Dola Saha, Asst. Prof., Dept. of CA, 98832 06685

Department of Computer Applications has organized a Webinar on “Data Science using Python” for the students of MCA on 28.04.2021.

Mr Indranil Das, Webskitters Technology Solutions Pvt. Ltd. has delivered his lecture on this topic and interacted with students.

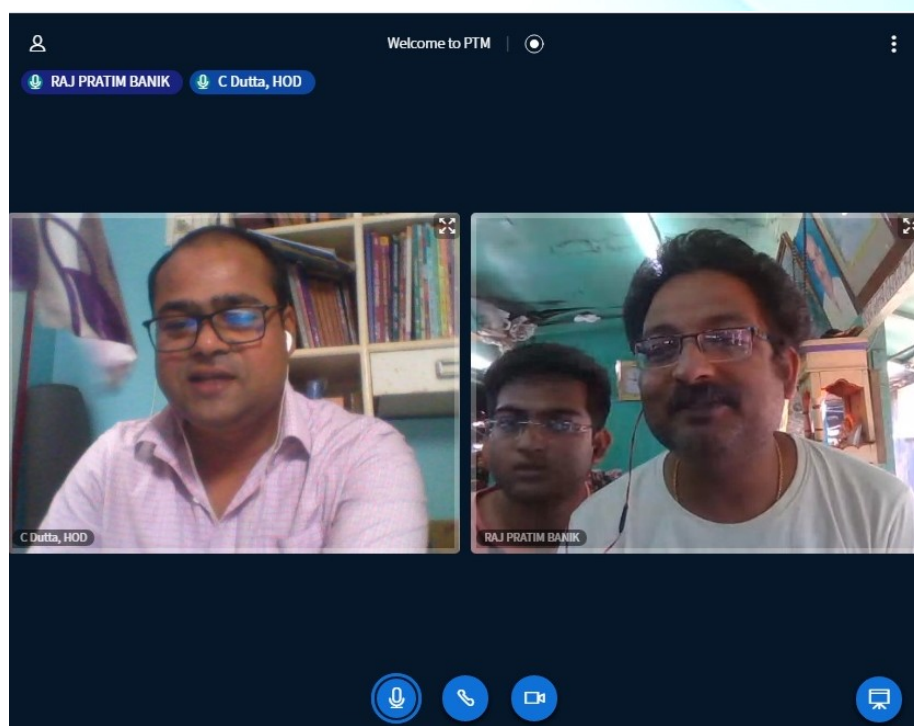
Department of Computer Applications has organized a Virtual Industry Visit for the students of MCA on 07.05.2021.

Department of Computer Applications has organized One day Online Industry Experts Meet “An exposure to modern IT & Software development” for the students of MCA on 12.08.2021.

Department of Computer Applications

Department of Computer Applications has organized online Parent-Mentor Meet for the students of MCA as per following details.

Stream	Semester	Mentor	Date of PTM
BCA	2nd	Mrs Dola Saha	17.04.2020
BCA	4th	Mrs Somalina Chowdhury	15.04.2020
BCA	6th	Mrs Dola Saha	15.04.2020
MCA	4th	Mrs Dola Saha	15.04.2020



Department of Computer Applications has organized the Annual Picnic on 09.02.2020 at Kanchrapara, N 24 PGS. Students of the Department along with faculties participated in the program. This year few alumni also joined the program.

- * **Department of Computer Applications has organized a One Day Webinar on “Cyber Security and Ethical Hacking”** for students of MCA on 30.03.2020. Mr Soumya Raha, Technical Expert from Ardent Computech Pvt. Ltd. has delivered his lecture on the topic.

Department of Computer Applications

Department of Computer Applications has published the Departmental News Letter "The Challenge" during lockdown period. Three editions of the News Letter are published.

Department of COMPUTER APPLICATIONS, GNIT

Message from Principal

Life has continued for us, even after the lockdown. GNIT has not witnessed any cessation of academic activities in this phase COVID-19 pandemic situation. I feel extremely happy that the **Department of Computer Applications (CA)** is going to publish this Special Edition Newsletter **"THE CHALLENGE"** containing conduction of Online classes and all sorts of digital activities they sportingly and enthusiastically did during the ongoing Lockdown period to keep all their Students busy and restricted to Stay at Home for which the Parents/Guardians of the Students also got relaxed that their wards are busy with studies and many other activities on digital Platform. Apart from conduction of digital classes and virtual Labs, they also did a good no. of Webinars, Parent Teacher Meet, Alumni Interaction, Blended Learning and the most interesting Digital Cultural programme. This Special Edition Lockdown News Letter is a reflection of the positive vibes of the CA Dept.

I wish that this Newsletter should be distributed to the mass to spread positive vibes all across to focus on the phrase **"Education Cannot Stop"**.

Stay Safe..... Stay at Home.....

S.K.Sen
Prof.(Dr.) Santanu Kr Sen
Principal

THE CHALLENGE
Lockdown-NEWSLETTER

Department of COMPUTER APPLICATIONS, GNIT

Message from HOD

At present the whole world is battling with the Corona virus, an invisible rival of mankind. The numbers of casualties are soaring every day. Even, the healthcare system is under threat. The whole World is finding way to mitigate the loss due to this COVID-19 pandemic.

We, the members of GNIT family, being a part of JIS Group strongly believe that **EDUCATION - the teaching learning process must not stop**. So, we moved to digital platform to reshape the lecture based traditional physical classrooms into digitally skilled online classrooms, where the students are able to think critically, solve problems in a creative manner. We are continuing our regular activities like - all regular classes, assignments, online tests, webinars, learning on MOOCs platform, different internship activities, student project works and all. We have successfully completed the syllabus, done necessary assessments as well. Thus it can be said that, the coronavirus has acted as a catalyst in transforming students into a more communicating, collaborating and observant individual, which would better allow them to solve realistic problems of life in future as well.

Tons of Thanks to our College and Management for their continuous support and motivation.

Stay careful, Stay safe... we all are waiting to greet a better World.

Chiranjib Dutta
Chiranjib Dutta
HOD, Assistant Professor
Dept of Computer Applications
GNIT

THE CHALLENGE
Lockdown-NEWSLETTER v2.0

Department of COMPUTER APPLICATIONS, Guru Nanak Institute of Technology

Message from Principal

Life has continued for us, even after the lockdown. GNIT has not witnessed any cessation of academic activities in this phase COVID-19 pandemic situation. I feel extremely happy that the **Department of Computer Applications (CA)** is going to publish this Special Edition Newsletter **"THE CHALLENGE"** containing conduction of Online classes and all sorts of digital activities they sportingly and enthusiastically did during the ongoing Lockdown period to keep all their Students busy and restricted to Stay at Home for which the Parents/Guardians of the Students also got relaxed that their wards are busy with studies and many other activities on digital Platform. Apart from conduction of digital classes and virtual Labs, they also did a good no. of Webinars, Parent Teacher Meet, Alumni Interaction, Blended Learning and the most interesting Digital Cultural programme. This Special Edition Lockdown News Letter is a reflection of the positive vibes of the CA Dept.

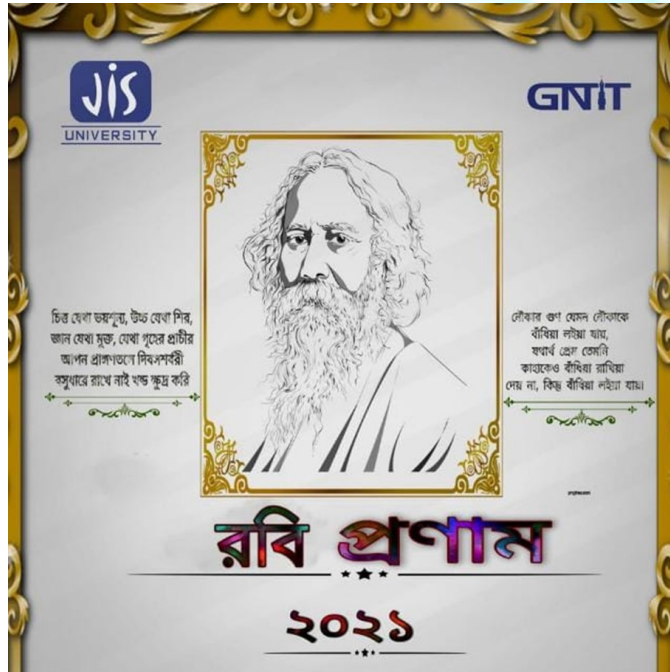
I wish that this Newsletter should be distributed to the mass to spread positive vibes all across to focus on the phrase **"Education Cannot Stop"**.

Stay Safe..... Stay at Home.....

S.K.Sen
Prof.(Dr.) Santanu Kr Sen
Principal, GNIT

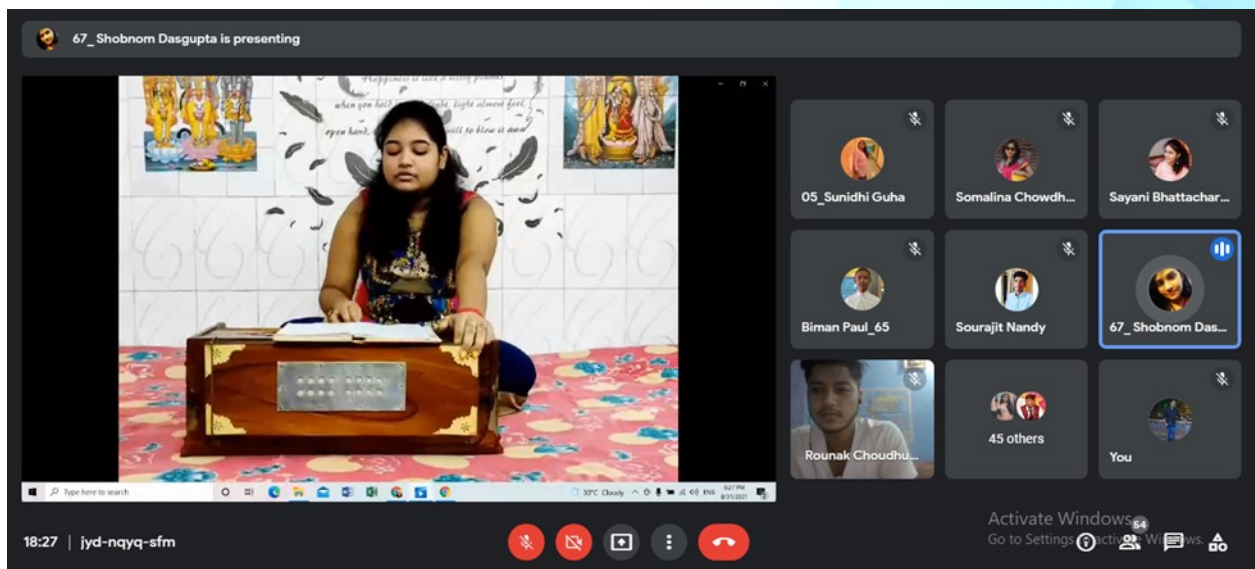
THE CHALLENGE
Lockdown-NEWSLETTER v3.0

Department of Computer Applications has celebrated RavindraJayanti on 21.05.2021. Students of the department performed different cultural events on the day.



Teachers' Day Celebration:

The students of the Department celebrated Teachers' Day on 5th September 2020 virtually on Google meet.



Department of Computer Applications

Farewell:

The MCA students of the Department celebrated Farewell for the passing year students on 31.08.2021 online mode.




Farewell

The day to celebrate a new beginning...

Organized by -

Department of Computer Applications Guru Nanak Institute of Technology

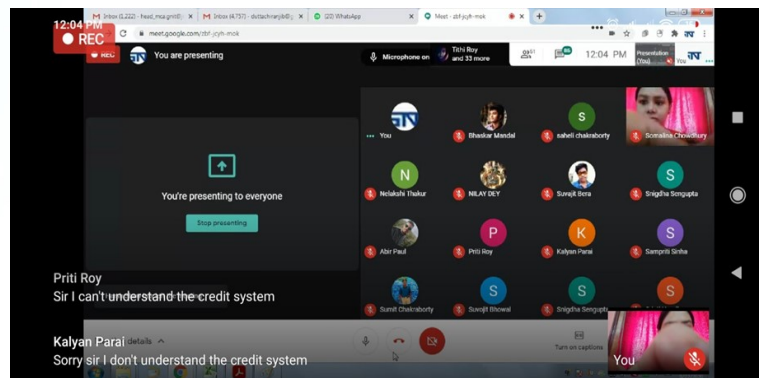


Date : 31-08-2021 (Tuesday)
Time : 6:00 pm
Platform : Google Meet (ONLINE)
Registration : No Registration Needed Join Directly through the link
Link will be provided through WhatsApp / email

The Bonds that can Never be Broken...

Department of Computer Applications, GNIT

Contact : Somalina Chowdhury, 98745 64589



Department of Computer Applications

Result Analysis of MCA :

Result Analysis : MCA 1st Sem (Autonomy)

Stream :	MCA	Sem :	1 st	Year :	1 st	Ses- sion:	2020-2021
1) No. of Students Appeared in Examination							29
2) No. of students successfully Completed without any Supplementary							29

Result Analysis : MCA 1 st Sem 2020 - 2021 (MCA under Autonomy)		
MCA Sem – 1		
Grade (SGPA)	No. of Students	% of Students
9-10.0	15	51.7
8-8.99	13	44.8
7-7.99	0	0
6-6.99	1	3.5
5-5.99	0	0
4-4.99	0	0
Less than 4	0	0
Total	29	100

Result Analysis : MCA 2nd Sem (Autonomy)

Stream :	MCA	Sem :	2 nd	Year :	1 st	Ses- sion:	2020-2021
1) No. of Students Appeared in Examination							28
2) No. of students successfully Completed without any Supplementary							28

Result Analysis : MCA 2 nd Sem 2020 - 2021 (MCA under Autonomy)		
MCA Sem – 2		
Grade (SGPA)	No. of Students	% of Students
9-10.0	16	57.1
8-8.99	11	39.3
7-7.99	1	3.6
6-6.99	0	0
5-5.99	0	0
4-4.99	0	0
Less than 4	0	0
Total	28	100

Result Analysis : MCA 5th Sem (Autonomy)

Stream :	MCA	Sem :	5th	Year :	3rd		Ses- sion:	2020-2021
1) No. of Students Appeared in Examination								16
2) No. of students successfully Completed without any Supplementary								16

Result Analysis : MCA 5 th Sem 2020 - 2021 (MCA under Autonomy)		
MCA Sem – 5		
Grade (SGPA)	No. of Students	% of Students
9-10.0	10	62.5
8-8.99	6	37.5
7-7.99	0	0
6-6.99	0	0
5-5.99	0	0
4-4.99	0	0
Less than 4	0	0
Total	16	100

Result Analysis : MCA 6th Sem (Autonomy)

Stream :	MCA	Sem :	6th	Year :	3rd		Ses- sion:	2020-2021
1) No. of Students Appeared in Examination								16
2) No. of students successfully Completed without any Supplementary								16

Result Analysis : MCA 6 th Sem 2020 - 2021 (MCA under Autonomy)		
MCA Sem – 6		
Grade (SGPA)	No. of Students	% of Students
9-10.0	14	87.5
8-8.99	2	12.5
7-7.99	0	0
6-6.99	0	0
5-5.99	0	0
4-4.99	0	0
Less than 4	0	0
Total	16	100

GURU NANAK INSTITUTE OF TECHNOLOGY

Research & Publications

ANNUAL REPORT

2020-21

Grants Received & Applied

Grant Received

Name of the Project	Department	Funding Agency	PI/ Co-PI	AICTE /Other Project Status
STTP on Green IoT for Green Environment	AEIE	AICTE	Bapita Roy	4,29,000/- received & all the 4 Phases of the STTP have been completed and UC got submitted in July 2021
FIST Level 0	ECE & ASHU	DST	Dr. Sunipa Roy (PI) Dr. Sucharita Bhattacharyya (Co-PI) Dr. Sreyasree Basu (Co- PI)	60 lacs: Rs. 29 lakh received in February 2020, lab is under process to install the procured equipment. Rs. 30 lakh more received in April 2021.
Grant for Organizing Conference, AQIS, AICTE	ECE & FT	AICTE	Dr. Sunipa Roy	4.0 lacs - Provisionally approved
MO-DROB	ECE	AICTE	Dr. Sunipa Roy	18 lacs Grant is utilised & report – Recommended

Grants Received & Applied

Grant Applied

Dept	Particulars
ECE AICTE - AQIS 2020-21	§Dr. Sunipa Roy, AICTE AQIS 20-21, MODROB (Polytechnic), §Amount: Rs. 18.00 Lacs §Dr. Surajit Basak, AICTE AQIS 20-21, RPS, Rs. 25.00 Lacs §Dr. Avali Banerjee, AICTE AQIS 20-21, RPS, Rs. 25.00 Lacs
CSE	Earth Observation Remote Sensing Tenure : 3 years; Amount 75 lacs PI. Dr. Mahamuda Sultna, Co-PI: Dr. Rupak chakraborty Team Member: Dr.Suman Bhattacharyya Status: Submitted on 30/08/2021
Institution- al	SATHI (Sophisticated Analytical and Technical Help Institutes) Project for Rs 22.72 Crores has been submitted in Nov 2021 AICTE IDEA Lab Project is under process
FT AICTE - AQIS 2020-21	MODROB, AQIS, AICTE Amount: 22.5 lacs Dr. Kakali Bandyopadhyay (Coordinator), Dr. Shiladitya Ghosh (Co-coordinator) Development of updated technology aided advanced FAQC laboratory for conducting basic training of UG students and innovative research oriented project work. Status: Expert evaluation completed
ECE	Project title: GENX PRENEURS Submitted to: iTBI (NIDHI inclusive Technology Business Incubator), DST Govt of India Division: Innovation and Entrepreneurship division Date submitted:09/07/2021 Project duration: 10 yrs; Total project cost: Rs 1.54 Crore
EE AICTE - AQIS 2020-21	Applied for Research Project Scheme on “Design and Development of an Artificial Intelligent based Battery Charging Station for Grid-Interactive Electric Vehicles” applied on 24th December,2020(AICTE AQIS 20-21), Amount: Rs. 24. 94 lacs PI: Dr. Suparna Biswas Co PI; Dr. Barnali Kundu, Dr. Debasree Saha MODROB for Polytechnic scheme applied on 24 th January, 2021 (AICTE ,AQIS 20-21) , “INTRODUCTION TO ELECTRIC GENERATION SYSTEMS LABORATORY(EEPC203)” - RECOMMENDED Amount : Rs. 24.50 lacs PI- Dr. Barnali Kundu, Dr. Debasree Saha

Patent filed

Application No.	Date of Publish	Title	Published
2019310498 81	11-06-2021	AGRO PHOTOVOLTAIC SYSTEM (APV)- EFFICIENT LAND USE FOR PROFICIENT AGRICULTURE.	YES
2019310498 82	11-06-2021	SYSTEM IDENTIFICATION AND MODELLING APPROACH TO IDENTIFY DISEASES USING EMG SIGNAL CLASSIFICATION.	YES
2019310498 83	11-06-2021	ANTI-PUNCTURE SYSTEM FOR LIGHT WEIGHT MOTOR VEHICLE (APSLWMV)	YES
2019310498 84	11-06-2021	COMMUNICATION WITH DYNAMIC ARM MOTION USING FUZZY CONTROL ALGORITHM FOR HOUSEKEEPING	YES
2019310498 86	11-06-2021	MOBILE CONTROLLED MICROCONTROLLER BASED FOUR IN ONE PAIN SOOTHING COMBO BELT THAT COMPRISING OF PROM-PAIN- RELIEF-OINTMENT-MASSAGER	YES
2019310498 87	11-06-2021	MICROCONTROLLER BASED MOBILE CONTROLLED SMART B(BOIL)-S(SLICE)-C(CRUSH)- M(MIX) QUADRA COMBO JAR FOR PREPARING HOMEMADE FRUIT BASED DELICIOUS FIRNI- KHEER DESSERT.	YES
201931049 888	11-06- 2021	AUTOMATED CATEGORIZATION OF POSTS BASED ON COMMENTS AND EMOJIS USING NOVEL POST RANKER AND POST PREDICTION MODEL.	YES
201931049 897	11-06- 2021	A COPLANAR WAVEGUIDE (CPW) FED AN- NULAR RING ARRAY ANTENNA WITH HIGH BANDWIDTH FOR WIRELESS COMMUNICA- TION APPLICATION	YES
201931049 898	11-06- 2021	AUTOMATIC PATROLLING MACHINE	YES

Patent filed

Patent De-tails	Patent status	Patent Number	Date of Award
20193104989 9	11-06-2021	N-QCM D SENSOR	YES
20193104992 3	11-06-2021	SYNOPSIS OF ASTUTE TRASH BARREL	YES
20193104990 0	11-06-2021	SOFTWARE CONTROLLED SMART SEALED VALVE REGULATED LEAD-ACID MOVEABLE BATTERY (120-240AH)	YES
20193104990	11-06-2021	GREEN POWER GENERATION	YES
20193104990 2	11-06-2021	FIRE FIGHTING SYSTEM.	YES
20193104990 3	11-06-2021	DESIGN OF EXO-ARM FOR PHYSICALLY DISABLED PERSONS	YES
20193104990 4	11-06-2021	MOBILE CAR ROBOTS CONTROL USING A TRIPPLE AXIS MAGNETOMETER	YES
20193104991 7	11-06-2021	IOT AND ML BASED AC AND DC VOLTAGE CONTROLLING AND ELECTRICAL PARAMETER MEASUREMENT	YES
.2019310499 18	11-06-2021	DESIGN AND DEVELOPMENT OF BIOMETRICALLY SECURED, REAL-TIME AND LOW COST ELECTRONIC VOTING MACHINE (EVM)	YES

Patent filed

Patent Details	Patent status	Patent Number	Date of Award
201931049919	11-06-2021	A WORKING PROTOTYPE OF SMART SOLAR AIR COOLER WITH AUTO WATER REFILL AND HIGH AIR-QUALITY INDEX(AQI) FEATURES	YES
201931049920	11-06-2021	A POTENTIAL SOURCE OF POLY-PHENOLS AND DIETARY FIBRE IN FOOD FORTIFICATION	YES
201931049922	11-06-2021	SYNOPSIS OF RADIO CONTROLLED UNMANNED DERRICK	YES
201931049921	11-06-2021	MICROENCAPSULATED STARCH BEADS ENRICHED IN NATURAL ANTIOXIDANTS	YES

PUBLICATIONS

FACULTY PUBLICATION

FACULTY PUBLICATION SUMMARY BREAKUP (2020 TO 2021)

2020-21						
	CSE	0	0	6	14	20
	ECE	0	0	16	21	37
	AEIE	0	0	4	4	8
	EE	0	0	10	4	14
	FT	0	0	17	0	17
	IT	0	0	3	4	7
	ASH	0	2	5	6	13
	CA	0	0	2	0	2
		0	2	63	53	118

DEPARTMENT: CSE

International Journal

- **Rupak Chakraborty**, Garima Verma, SuyelNamasudra, "IFODPSO-based multi-level image segmentation scheme aided with Masi entropy", Journal of Ambient Intelligence and Humanized Computing (2020), SCIE (4.54), Springer, DOI: <https://doi.org/10.1007/s12652-020-02506-w>, Published: 02 September 2020.
- Suyel Namasudra, **Rupak Chakraborty**, Dr. Arun Kumar Sangaigh, "FAST: Fast Accessing Scheme for Data Transmission in Cloud Computing", Peer-to-Peer Networking and Applications (2020) SCIE (2.793), Springer, DOI: <https://doi.org/10.1007/s12083-020-00959-6>, Published: 28 August 2020.
- SuyelNamasudra, **Rupak Chakraborty**, Abhishek Majumder, Anish Kumar Saha, Nageswara R Moparthi, "Securing Multimedia by Using DNA Based Encryption in the Cloud Computing Environment", ACM-Transactions on Multimedia Computing Communications and Applications, Accepted, SCIE(3.275), ACM. Published: December,2020
- R.Shaw,M. Mishra, & **Amrut Ranjan Jena. (2021, February)**. Knowledge Mining in Spreading Pattern of COVID-19 and Its Impact on India Economy. In Journal of Physics: Conference Series (Vol. 1797, No. 1, p. 012013). IOP Publishing.
- S.Pati, S.Mallick, S.Chakraborty, R.Kaur, **Moloy Dhar, & Amrut Ranjan Jena** (2021, February). A Regression Model Frame with IoT to Predict COVID Zone. In Journal of Physics: Conference Series (Vol. 1797, No. 1, p. 012029). IOP Publishing.

Ipsita Saha (2021, March). “Development of Sustainable Business Model: A Conceptual Framework for the Financial Sector to Obtain Successful ERP”, In INTERNATIONAL JOURNAL OF SUSTAINABLE DEVELOPMENT AND PLANNING (IJS DP) (Vol. 15, No. 8) Scopus Indexed.

International Conference

R. Shaw, M. Mishra, **Amrut Ranjan Jena**, “Knowledge Mining in Spreading Pattern of COVID-19 and Its Impact on India Economy” Accepted in (31st July-2020) International Online Conference on Engineering Response to COVID- 19 (IOCER COVID-19) organize by JIS College of Engineering on 8th and 9th October 2020 (Conference proceedings will be published in Journal of Physics: Conference Series indexed in SCOPUS, as well as EI Compendex and Inspec).

Sonjoy Rana, Shounak Sengupta, Sourav Jana, Rahul Dan, **Mahamuda Sultana** and Diganta Sengupta “Prototype Proposal for Quick Accident Detection and Response System”, IEEE Fifth International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2020), CHRIST (Deemed to be University), Bangalore, India, November 26-27, 2020 (In Press).

Dr. Suman Bhattacharya, Dr. Mahamuda Sultana, “Deep CNN Based automatic detection and identification of Bengal Tigers”, 3rd International Conference on Computational Intelligence in Communications and Business Analytics, Springer, 7-8 Jan, 2021 (In Press).

Sudeep Ghosh, **Mandira Banik**, Moumita Das, Tridib Chakraborty, Chowdhury Md. Mizan, Arkajyoti Chakraborty, “Clustered Fault Repairing Architecture for 3D ICs using Redundant TSV” First International Conference on Innovations in Software Architecture and Computational Systems (ISACS 2021), 02-03 April, 2021. (Proceedings will be published through the Springer Lecture note series “Network and System”, Scopus Index)

Mandira Banik, Sudeep Ghosh, **Amrut Ranjan Jena**, Tridib Chakraborty, Trishita Ghosh, Akash Gupta “APPROXIMATE COMPUTING: ERROR TOLERANT ADDER” International Conference on Applications of Networks, Sensors and Autonomous Systems Analytics (ICANSASA 2020). Organized by JIS College of Engineering on 11 th & 12 th December 2020 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Rupak Chakraborty, Sourish Mitra, Rafiqul Islam, Nirupam Saha, Bidyut-mala Saha “An Improved Differential Evolution Scheme for Multilevel Image Thresholding Aided with Fuzzy Entropy”, International Conference on Inno-

PUBLICATIONS

vations in Software Architecture and Computational Systems (ISACS - 2021) on 2-3 April, 2021 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Rupak Chakraborty, ”Breast Cancer Histopathological Image Classification using Convolutional Neural Networks”, International Conference on Innovations in Software Architecture and Computational Systems (ISACS - 2021) on 2-3 April, 2021 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Rupak Chakraborty, ”An Improved K-Means Algorithm for Effective Medical Image Segmentation”, International Conference on Innovations in Software Architecture and Computational Systems (ISACS - 2021) on 2-3 April, 2021 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Sayani Chandra, Sangeeta Bhattacharya, ”Suicide Ideation Detection in Online Social Networks: A Comparative Review”, International Conference on Innovations in Software Architecture and Computational Systems (ISACS - 2021) on 2-3 April, 2021 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Amrut Ranjan Jena, Santanu Kumar Sen, ”A Framework for Predicting Placement of a Graduate using Machine Learning Techniques”, International Conference on Innovations in Software Architecture and Computational Systems (ISACS - 2021) on 2-3 April, 2021 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Suman Bhattacharya, Mahamuda Sultana, ” An Approach of Safe Stock Prediction using Genetic Algorithm”, International Conference on Innovations in Software Architecture and Computational Systems (ISACS - 2021) on 2-3 April, 2021 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Moloy Dhar, Amrut Ranjan Jena, ”A regression model frame with IoT to predict covid zone”, IOCER COVID-19.

Moloy Dhar, ”Profanity Detection in Social Media Text Using Hybrid Approach of NLP & Deep Learning Techniques”, FEMAS-2021.

Ipsita Saha, ”Circular Economy Implementation in SMEs in India”, 10th International Conference on Sustainable Waste Management towards Circular Economy.

DEPARTMENT: ECE

International Journal

Dr. Surajit Basak, “On Energy Efficient Secure Routing in Multi-hop Underlay D2D Communications for IoT Applications”, Ad Hoc Networks (Elsevier), vol. 128, pp 102275-102283, 1st Nov., 2020. Impact Factor: 3.643. DOI: <https://doi.org/10.1016/j.adhoc.2020.102275>. (SCI).

Dr. Soumik Podder, “Green biosynthesis of silver nanoparticles using Dregea volubilis flowers: Characterization and evaluation of antioxidant, antidiabetic and antibacterial activity”, Inorganic and Nano-metal Chemistry (Taylor& Francis), doi.org/10.1080/24701556.2020.1814331, 2020 (published), Impact Factor: 0.839 (SCIE, SCOPUS).

Avali Ghosh, Sisir K. Das and Annapurna Das, “Analysis of Crosstalk in High Speed and High Frequency Printed Circuit Board”, International Journal of Electronics on 19th January 2021 (SCI). DOI: <http://dx.doi.org/10.1080/00207217.2020.1870729>.

Suparna Biswas, Sayan Roy Chowdhuri, Palasri Dhar, Suparna Karmakar, “RECENT ADVANCES OF FACE RECOGNITION IN TRANSFORM DOMAIN”, JCR. August, Year: 2020, Volume: 7, Issue: 19: 6385-6393. DOI: 10.31838/jcr.07.19.735 (SCOPUS INDEXED).

Suparna Biswas, Sayan Roy Chaudhuri, Palasri Dhar, Dyuti Nandi, Sulata Pandit, “Designing of Automatic Car Parking System”, International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653 ,VOL: 8,NOV 2020.(Google Scholar and UGC Approved).

S.Roy, “Efficient Room Temperature Hydrogen Gas Sensor using ZnO Nanoparticles reduced Graphene Oxide Nanohybrid” IEEE Sensors Journal. Impact Factor: 3.8, Volume 21, Issue 2, Jan 2021 10.1109/JSEN.2020.3020755

• **S.Roy**, “Performance Improvement of n-ZnO/p-rGO Heterojunction based Room temperature Hydrogen Sensor” IEEE Sensors Letters. Impact Factor: 3.8, Volume 5, Issue 5, April 2021,10.1109/LESENS.2021.3072424.

Kaushik Roy, Srijoni Malakar, Soumik Podder and Koushik Pal, “Particular amino acid detection of by Henna leaf extract mediated copper nanoparticles.” Research Journal of Pharmaceutical, Biological and Chemical Sciences, 12(3) 2021, pp. 87-93, Impact Factor: 0.35 (SCOPUS).

PUBLICATIONS

Suparna Biswas, Wriju Banerjee, Sanchari Saha, Saswata Sundar Maity, Tathagata Bhattacharyya and Subhrajyoti Sadhu, “**GPS Tracking, QR code Scanner Based Application to Help the Health Workers and Common Citizens during Covid-19**”, 012026, February 2021, Volume 1797, No. 1, Journal of Physics Conf. Ser., <https://doi.org/10.1088/1742-6596/1797/1/012026> (**SCOPUS INDEXED,IF=0.59**)

Suparna Biswas, Senjuti Mazumdar, Sangeeta Rana, S.B. Amreen Saba, **Palasri Dhar and Sayan Roy Chaudhuri**, “**Face Detection based approach to combat with COVID-19**”, 012031, February 2021, Volume 1797, No. 1, **Journal of Physics Conf. Ser.**, <https://doi.org/10.1088/1742-6596/1797/1/012031>, (**SCOPUS INDEXED,IF=0.59**)

Suparna Biswas, Shatadru Biswas, Bidushi Saha, “**Improvement of Offline Signature Verification Method using Discrete Wavelet Transform**”, Journal of The Institution of Engineers (India): Series B, 17th May 2021, <https://doi.org/10.1007/s40031-021-00603-8>, (**SCOPUS INDEXED,IF=0.88**)

Ayushi Bhawal, Debaparna Dasgupta, Arka Ghosh, Koyena Mitra and **Surajit Basak**, “**Arduino Based Hand Gesture Control of Computer**” International Journal of Engineering Science and Computing (IJESC), vol. 10, no. 6, 15th June 2020

- **Surajit Basak**, Jayita Pramanik, Poushali Paul, Sneha Baidya and Tias Ghosh, “**Controlling Railway Gates Using Automata Based Intelligent Controller**”, International Journal of Innovative Research in Technology (IJIRT), vol. 7, Issue 11, pp. 513-518, 11th April 2021. ISSN: 2349-6002
- **Anurima Majumdar, Antara Ghosal**, Sisir Kumar Das, Annapurna Das "Analysis of Coaxial Probe Fed Circular Patch Antenna (CPA) using Green's Function and Effect of Slots on CPA" fourth Annual Technical Volume of Electronics and Telecommunication Engineering Division Board on the theme "Communication Networking using Intelligent Sensor Technology".
- **Antara Ghosal, Anurima Majumdar**, Sisir Kumar Das, Annapurna Das "Analysis of Input impedance Characteristics of Rectangular Patch Antenna Using green's Function" fourth Annual Technical Volume of Electronics and Telecommunication Engi-

neering Division Board on the theme "Communication Networking using Intelligent Sensor Technology".

Anurima Majumdar, Romik Halder, Saumyadeep Bhattacharyya, Arpan Mondal, Asmita Chakraborty, Ankita Roy, Rohit Dubey, Development of an Ultimate People Helping Set-up with Android Application and Cargo Drone', Solid State Technology, March 2021.

International Conference

Kaushik Roy, S. Malakar and Sayan Roy Chaudhuri, "Selective detection of amino acid by Lawsonia inermis leaf extract-mediated copper nanoparticles", 9th International Conference on Computing, Communication and Sensor Network (Online mode), Kolkata, 17-18th October, 2020.

Sunipa Roy, "Study of Graphene Field Effect Transistor (GFET) for Chemical Sensing Application". Proc. of IOCER 2020 Conference, 8-9th October 2020, JISCE Kalyani.

Sunipa Roy, "Optimization of low frequency noise for dielectric modulated TFET for bio sensing applications". Proc. of IOCER 2020 Conference, 8-9th October 2020, JISCE Kalyani.

Sunipa Roy, "Development of Highly Sensitive Room Temperature Gas Sensor using rGO-ZnO Nanohybrid" Nano Virtual 2020" London, United Kingdom, November 25- 26, 2020.

Suparna Biswas, Palasri Dhar, Sayan Roy Chowdhuri, "Face Detection based approach to combat with COVID-19", Proc. of IOCER 2020 Conference, 8-9th October 2020, JISCE Kalyani.

Suparna Biswas, "GPS Tracking, QR code Scanner Based Application to Help the Health Workers and Common Citizens during Covid-19", Proc. of IOCER 2020 Conference, 8-9th October 2020, JISCE Kalyani.

Kaushiki Bhattacharya, Mrinmay Hazra, Debarghya Dutta and **Kaushik Roy**, "Smart Dustbin Utility System using IoT", FEMAS 2.0 (Online mode), Kolkata, 28-29th January, 2021.

Swagata Bhattacharya, Somsubhra Talapatra, Dr. Debotosh Bhattacharjee, Dr. Amlan Chakrabarti "A Scalable VLSI Architecture For Illumination-Invariant and Heterogeneous Face Recognition", Proc. of ICEEE 2021 Conference" Springer Book of Innovations in Electrical and Electrical Engineering",

PUBLICATIONS

(Scopus/WoS Indexed) Springer Singapore, 2-3 January,,2021

Suparna Biswas, Rohan Kumar Banerjee, Ankita Sarkar, **Palasri Dhar**, **Avali Banerjee**, **Sayan Roy Chaudhuri**, “Real-Time Object Detection using YOLO Algorithm”, International Conference on Frontiers in Engineering, Management and Applied Science (FEMAS 2021),Guru Nanak Institute of Technology, Kolkata, January 28-29, 2021.

Suparna Biswas, Ayusha Biswas,Arpan Bhawal, **Sayan Roy Chaudhuri**, “AIR CONDITIONER SYSTEM CONTROL USING FUZZY LOGIC”, International Conference on Frontiers in Engineering, Management and Applied Science (FEMAS 2021),Guru Nanak Institute of Technology, Kolkata, January 28-29, 2021.

• **Antara Ghosal**, **Anurima Majumdar**, **Sisir Kumar Das**, **Annapurna Das**, “A Wine Glass Shaped MSPA For Wireless Communication Applications”, International Conference on Frontiers in Engineering, Management and Applied Science (FEMAS 2021),Guru Nanak Institute of Technology, Kolkata, January 28-29, 2021.

• **Koushik Pal**, Mahuya Maity, Anjali Kumari, Debanjana Das, Debarati Roy, Madhurima Mallick, Plaban Mal,”Rfid Based Device Control And Authentication Using Pic Controller”, in International Conference on Frontiers in Engineering, Management and Applied Science (FEMAS 2021),Guru Nanak Institute of Technology, Kolkata, January 28-29, 2021

• **Koushik Pal**, Anjali Kumari,Debanjana Das, Debarati Roy, Mahuya Maity, Madhurima Mallick, Plaban Mal, “ DTMF Based Load Control System in PRAYAS-2020, MCKV Institute of Engineering, December 20th 2020

• Piyal Bose, Arko Saha, Aritra Ghosal, Arjyama Seal, Bikram Paul and **Surajit Basak**, “COVID FRONTLINER: A First Level Smart Health Assistant App & Website for Covid 19”, 28-29th Jan., 2021, FEMAS 2.0-2021

Avali Banerjee, Sanchari Saha, Wriju Banerjee, Tathagata Bhattacharyya, Saswata Sundar Maity, “ Facial and Voice Recognition Based Security and Safety System in Car”, IEEE 8th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO'2020) (Trends and Future Directions), Technically Co-Sponsored by IEEE UP Section (India), Amity University, Noida, 4th - 5th June, 2020. Electronic ISBN: 978-1-7281-7016-9 DOI: [10.1109/ICRITO48877.2020.9197886](https://doi.org/10.1109/ICRITO48877.2020.9197886)

Avali Banerjee, Sangeeta Rana, S. B. Amreen Saba, Samayita Chakraborty, “Bionic Eye-A Review”, IEEE 8th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO'2020) (Trends and Future Directions), Technically Co-Sponsored by IEEE UP Section (India), Amity University, Noida, 4th - 5th June, 2020. Electronic ISBN: 978-1-7281-7016-9 DOI: [10.1109/ICRITO48877.2020.9197834](https://doi.org/10.1109/ICRITO48877.2020.9197834)

• Ahmed Reza, Chandrima Banerjee, **Soma Boral**, **Arun Kumar Mondal**, “*Smart Battery System for Home and Office*”, International Congress on Renewable Energy (ICORE-2020), Guru Nanak Institute of Technology, Kolkata, 7th - 8th February,

2020. ISBN: 978-93-5396-201-2

- Vivek Kumar Jha, Debajyoti Debbarma, Swapnil Anand, **Surajit Basak and Soma Boral**, “SAHAR: Spectrum-Aware Hybrid Adaptive Routing for Cognitive Radio Based Disaster Response Networks”, International Congress on Renewable Energy (ICORE-2020), Guru Nanak Institute of Technology, Kolkata, 7th - 8th February, 2020. ISBN: 978-93-5396-201-2
- Nishan Dutta, Somnath Bhattacharya, **Ramkrishna Mondal, Soma Boral, Surajit Basak**, “Arduino Based Automatic Floor Cleaner with Moisture Sensor”, International Congress on Renewable Energy (ICORE-2020), Guru Nanak Institute of Technology, Kolkata, 7th - 8th February, 2020.
- Chandrima Banerjee, Ahmed Reza, **Soma Boral, Arun Kumar Mondal**, “AI BASED SURROUNDING DETECTION GOGGLES”, 2nd International Conference on Frontiers in Engineering, Management and Applied Science (FEMAS-2021) organized by GNIT, Sodepur, Kolkata, India from 28-29 January 2021.

Debasis Saha, **Soma Boral, Ramkrishna Mondal, Arun Kumar Mondal**, “Automatic Compact Sanitization And Cleaning Machine”, SAMATVA 2020, Guru Nanak Institute of Technology, Kolkata, 16th - 18th October, 2020

DEPARTMENT: FT

International Journal

Saikat Mazumder, Kakali Bandyopadhyay, “Organizing The Unorganized: An Overview of COVID-19 Impact On FMCG Sector and Indian Economy”, International Journal of Application or Innovation in Engineering & Management (IJAEM), [DOI:10.26484](https://doi.org/10.26484), ISSN:2319-4847, Volume: 9, Issue: 7, Pg: 62-69, July, 2020. Thompson Reuters Researcher ID: N-6095-2015, Scopus indexed .

Dr. Kakali Bandyopadhyay, “A Review on Utilization of Biosensors for Detection of Adulteration in Fish” International Journal for Modern Trends in Science and Technology (IJMTST), Web of Science ResearcherID [AAJ-4390-2020](https://orcid.org/0000-0001-9142-4390), Impact Factor-4.124 *UGCGazette Régulations(Journal Id: 43137)* ISSN: 2455-3778,6(10):50-55, 2020.

Dr. Kakali Bandyopadhyay, “Study On The Fortification Techniques Of Multiple Food Products Using Immunity Boosting Micronutrients And Antioxidants: A Literature Review”, International Journal of Engineering Applied Sciences and Technology, 5(6):163-169, ISSN No. 2455-2143, 2020, Impact Factor: 4.982, DOI: 10.33564, H-index: 6

Saikat Mazumder, Amit Barman “Onion Productivity and Price Change Aspects in India: An Overview”, International Journal for Modern Trends in Science and

PUBLICATIONS

Technology (IJMTST) Web of Science Researcher ID AAJ-4390-2020. Impact Factor- 4.124. UGC Gazette Régulations (Journal Id: 43137) ISSN: 2455-3778, 6(10):118-122, 2020.

Dolanchapa Sikdar, “Activated carbonaceous materials from tea waste and its removal capacity of indigo carmine present in solution: synthesis, batch and optimization study”, In Journal of Sustainable Environment Research (<https://doi.org/10.1186/s42834-020-00070-8>) **Scopus indexed, ISSN: 2468-2039**, BioMedCentral (BMC).

Saikat Mazumder “Overview of worldwide potato production scenario with special focus in India and its industrial utilization”, International Journal for Modern Trends in Science and Technology (IJMTST). International Journal for Modern Trends in Science and Technology (IJMTST) Web of Science Researcher ID AAJ-4390-2020. Impact Factor- 4.125. UGC Gazette Régulations (Journal Id: 43137) ISSN: 2455-3778,

Shairee Ganguly and Dolanchapa Sikdar, “A review on Anthocyanin Pigment with Respect to It’s Nutraceutical Properties”, International Journal for Modern Trends in Science and Technology (IJMTST). International Journal for Modern Trends in Science and Technology (IJMTST) Web of Science Researcher ID AAJ-4390-2020. Impact Factor- 4.125. UGC Gazette Régulations (Journal Id: 43137) ISSN: 2455-3778, Volume 6, Issue 12, December 2020.

Dolanchapa Sikdar, “**Entomophagy: A Future Feed Security System**”, International Journal for Modern Trends in Science and Technology (IJMTST). International Journal for Modern Trends in Science and Technology (IJMTST) Web of Science Researcher ID AAJ-4390-2020. **Impact Factor- 4.125**. UGC Gazette Régulations (Journal Id: 43137) ISSN: 2455-3778, Volume 6, Issue 12, December 2020.

Shairee Ganguly, Dolanchapa Sikdar, Kakali Bandyopadhyay, A Review on Cocoa Butter Alternatives in Chocolate Preparation, **International Journal for Modern Trends in Science and Technology**, impact factor: 4.175, DOI: <https://doi.org/10.46501/IJMTST070130>, Web of Science Researcher ID AAJ-4390-2020, UGC Journal ID: 43137, ISSN: 2455-3778, 7(01): 135-140, January, 2021.

Dolanchapa Sikdar, “Synthesis of activated carbon material using Sawdust as precursor and its application for dye removal: Batch study and optimization using Response Surface Methodology”, *Biomass Conversion and Biorefinery*, 2021 <https://doi.org/10.1007/s13399-021-01385-1>. **Scopus indexed, ISSN:**

2190-6823.

Kakali Bandyopadhyay, Microbial Spoilage of Meat and It's Detection - A Review, *International Journal of Modern Science and Technology*, www.ijmst.co. ISSN: 2456-0235, 6(2-3):23-30. February, 2021.

Kakali Bandyopadhyay, Detection Methods of Non-permitted Food Color, Metanil Yellow: A Review, *International Journal for Modern Trends in Science and Technology*, impact factor: 4.175, DOI: <https://doi.org/10.46501/IJMTST0703033>, <http://www.ijmtst.com/vol7issue03.htm>, Web of Science ResearcherID AAJ-4390-2020, UGC Journal ID: 43137, ISSN: 2455-3778, 7 (03): 201-204, March, 2021.

Kakali Bandyopadhyay, Shiladitya Ghosh, Application Of Artificial Intelligence In Food Industry - A Review, Vol. 5, Issue 11, ISSN No. 2455-2143, Pages 145-152, 2021, IJEAST (<http://www.ijeast.com>), March 2021.

Monika Paul, Kakali Bandyopadhyay, Detection and Estimation of Metanil Yellow & Congo Red: Carcinogenic Food Colourants, Present in Different Food Samples, *International Journal for Modern Trends in Science and Technology*, ISSN: 2455-3778 online, DOI: <https://doi.org/10.46501/IJMTST0705007>, Available online at: <http://www.ijmtst.com/vol7issue05.html>, impact factor: 4.175, 7(05): 49-55, May, 2021.

Saikat Mazumder, "An Overview of Various Types of Banana Production And Its Market Value In India", *International Research Journal of Engineering and Technology* (e-ISSN: 2395- 0056, p-ISSN: 2395-0072) Volume: 07, Issue: 12, Pg: 1195-1204, Available online DOI: <https://irjet.net/volume7-issue12>, December 2020, Thompson Reuters indexed.

Saikat Mazumder, "An Overview of Rice Productive Cultivation and Variety in India" *International Research Journal of Engineering and Technology* (e-ISSN: 2395- 0056, p-ISSN: 2395-0072) Volume: 07, Issue: 12, Pg: 1195-1204, Available online DOI: <https://irjet.net/volume7-issue12>, December 2020, Thompson Reuters indexed.

Saikat Mazumder, "Betel Leaf: The Ignored Green Gold", *ADALYA JOURNAL* (ISSN NO: 1301-2746), Web of Science group journal, Volume: 10, Issue: 4 Pg: 1-19, 2021, available online: DOI: <https://doi.org/10.37896/aj10.4/001>, April 2021

DEPARTMENT: EE

International Journal

Shyamal Kumar Roy, Suman Ghosh, "Modeling of Plasma Etching Reactors based on Numerical Study", International Journal of Engineering Research and Applications (IJERA), UGC Approved Journal, ISSN: 2248-9622, Vol. 10 - No. 10 (Oct. 2020), DOI: 10.9790/9622-1010020105 (Published).

Rikta Majumder, "DTMF Based Home Appliance Control" Arabian Journal for Science and Engineering.ID: AJSE-D-20-05452, SCI indexed, (Communicated)-Oct 2020.

Debasree Saha, Dipu Sarkar, Sagar Kudkelwar, "Evaporation rate based water cycle algorithm for directional over current relay coordination", Electrical component and system, Taylor and Francis, Revision submitted.,October,2020

S. Datta, A. Chattopadhyaya, A. Duary, S. Chattopadhyay, A. Das, " Remote End Load Bus Fault Diagnosis in IEEE Standard 14 Bus Microgrid System Using S-Transform Based Skewness Extraction", Sustainable Energy, Grids and Networks.

Barnali Kundu, "Cloud based Real-time Vibration and Temperature Monitoring System for Wind Turbine", AI and IOT in renewable energy, Publisher: Springer Nature, Singapore Series: Studies in Infrastructure and Control, 7th January, 2021. (Book Chapter) published by Springer Nature. <https://www.springer.com/gp/book/9789811610103>

Shyamal Kumar Roy, Suman Ghosh, Madhumita Chakraborty, "Static Series Compensator and Static Transfer Switch for Voltage Dip Mitigation with Short Interruptions", International Journal of Enhanced Research in Science, Technology & Engineering ISSN: 2319-7463, Vol. 10 Issue 6, June-2021(UGC Indexed)

Swapnadip Datta, Tuhin Sarkar, Pritam Maity, Swapnil Dutta Gupta, Uday Sankar Debbarma, **Suman Ghosh, Shyamal Kumar Roy**, "Low Cost Android Based Electrical Appliance Control", International Journal of Enhanced Research in Science, Technology & Engineering ISSN: 2319-7463, Vol. 10 Issue 6, June-2021(UGC Indexed)

Shyamal Kumar Roy, Suman Ghosh, Barnali Kundu, "Neural Protective Relay for a Circuit Breaker",International Journal of Enhanced Research in Science, Technology & Engineering ISSN: 2319-7463, Vol. 10 Issue 6, June-2021(UGC Indexed).

Barnali Kundu, Raunak Seal, Neha Gupta, “**Cyber Vulnerabilities in Smart Grid: A Review**”, International Journal of Engineering Research & Technology (IJERT), vol. 9, no. 11, pp. 51-55, June, 2021 (ISSN: 2278-0181)

Subhajit Dutta, Achinta Das, Ayan Nandi **Barnali Kundu** “**AFFRO-BOT Autonomous Forest Fend Robot**”, International Journal of Engineering Research & Technology (IJERT), vol. 9, no. 11, pp. 169-174, June, 2021(ISSN: 2278-0181)

International Conference

S. Datta, A. Chattopadhyaya, S. Chattopadhyay, A. Das, “ Harmonic Distortion, inter-harmonic Group Magnitude and Discrete Wavelet Transform based Statistical Parameter Estimation for Line to Ground Fault Analysis in Microgrid System”, *MFIS-2020*, Kolkata, 3-4 October, 2020.

Barnali Kundu, Arghya Sarkar “Distributed Generators Curtailment for Congestion Mitigation” 7th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON 2020), 27th - 29th November 2020, Department of Electrical Engineering, Motilal Nehru National Institute of Technology Allahabad, Prayagraj, India.

Barnali Kundu, “Cloud-based Real-time Vibration and Temperature Monitoring System for Induction Motor, 3rd International Conference on Computational Advancement in Communication Circuit and System (ICCACCS 2020), Narula Institute of Technology, Kolkata 17th -19th December, 2020.

Suman Ghosh, Avinash Shaw, **Aveek Chattopadhyaya**, **Barnali Kundu**, Chandan Kr. Chanda, J. K. Das , "FFT and PMU Based Fault Analysis in Double Circuit Transmission Line”, International Conference on Artificial Intelligence and Smart Systems (ICAIS 2021), JCT College of Engineering and Technology, Coimbatore, India, 25-27th March 2021. (IEEE Conference)

DEPARTMENT: IT

International Journal

Tridib Chakraborty, Sudeep Ghosh, Trishita Ghosh, Chowdhury Md. Mizan, Suparna Karmakar “(3, 3) Visual Cryptography for Online Certificate Authentication”, International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-9 Issue-6, August 2020 Scopus Index.

Suparna Biswas, Sayan Roy Chowdhuri, Palasri Dhar, **Suparna Karmakar**“RECENT ADVANCES OF FACE RECOGNITION IN TRANSFORM DOMAIN”, Journal of Critical Review. Year: 2020, Volume: 7, Issue: 19: 6385-6393. DOI: 10.31838/jcr.07.19.735.(Scopus).

Sudeep Ghosh, Mandira Banik,**Tridib Chakraborty, Trishita Ghosh, Chowdhury**

PUBLICATIONS

Md. Mizan, Suparna Karmakar, “Repairing of Faulty TSVs Using Redundant TSVs” International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-10 Issue-7, September 2020 Scopus Index.

International Conference

Mandira Banik, **Sudeep Ghosh**, Amrut Ranjan Jena, **Tridib Cakrabort**, **Trishita Ghosh**, Akash Gupt “APPROXIMATECOMPUTING: ERROR TOLERANT ADDER” International Conference on Applications of Networks, Sensors and Autonomous Systems Analytics (ICANSASA 2020). Organized by JIS College of Engineering on 11th& 12th December 2020 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Sumit Choudhary, Subhra Sarkar, **Trishita Ghosh,Tridib Chakraborty, Sudeep Ghosh, Suparna karmakar**"A Low-Latency Scheme Using Real-time Constraints for V2V Communication in VANET"International Conference on Applications of Networks, Sensors and Autonomous Systems Analytics (ICANSASA 2020). Organized by JIS College of Engineering on 11th& 12th December 2020 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial computing”, Scopus Index).

Shamma Shabnam Nasim, **Chowdhury Md. Mizan, Tridib Chakraborty, Sudeep Ghosh, Suparna Karmakar** , “A Survey of Load balanced Job scheduling scheme in cloud computing” in FICR International conference on Rising Threats in Expert Applications & Solutions, has been published in Advances in Intelligent Systems and Computing, October, 2020, ISBN/ISSN number 978-981-15-6013-2.

Sudeep Ghosh, Mandira Banik,Moumita Das, Tridib Chakraborty, Chowdhury Md. Mizan, Arkajyoti Chakraborty, “Clustered Fault Repairing Architecture for 3D ICs Using Redundant TSV”, First International Conference on Innovations in Software Architecture and Computational Systems (ISACS-2021) organized by Department of Computer Science & Engineering, Guru Nanak Institute of Technology, JIS Group, from 2nd -3rd April, 2021, Conference Proceedings will be published in Springer Lecture Notes in Networks and Systems.

DEPARTMENT: AEIE

International Journal

Shilpita Hazra, **Bapita Roy, Paramita Banerjee**, Sayani Dey, Sonali Das, "Non-Contact Estimation of Surface Roughness", Pramana Research Journal, UGC

approved Journal, Volume 10, Issue 8, 2020, pp - 48-55. ISSN NO: 2249-2976, August-2020.

Paramita Banerjee, Ratna Ghosh and Bhaswati Goswami “Inferring material parameters of a single mode piezo element from a derived electrical series model”, Journal of The Institution of Engineers (India): Series B, Springer publishers. Scopus Indexed, H Index -8, Impact factor: 0.52. (Accepted for publication)Dec-2020.

Paramita Banerjee, Ratna Ghosh and Bhaswati Goswami “Predictability of nominal dental implant resonances”, Advances in Biorsearch, Additional WOS Indexes (Zoological Records) SOC EDUC publishers. Scopus Indexed, H Index -11, Impact factor: 0.36. (Accepted for publication)Dec-2020.

Automated Hand Sanitizer Dispenser by **Paramita Banerjee, Bapita Roy**, Soumyajit Dutta, Nabanita Sardar, Argha Majumder, International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211 Volume 8, Issue 12, December-2020, pp: 296-299

International Conference

Quartz crystal microbalance sensors in various engineering fields: a review by **Paramita Banerjee, Sunipa Roy**, Sumedha Bhattacharya, International Conference on Frontiers in Engineering, Management and Applied Science, (FEMAS 2021), ISBN No: 978-93-5437-645-0, 28-29 January 2021, Kolkata.

Design of Automatic power consuming street light controller by **Nabamita Paul, Saswati Chatterjee, Mrinmoy Dutta, Bapita Roy**, Argha Majumder, International Conference on Frontiers in Engineering, Management and Applied Science, (FEMAS 2021), ISBN No: 978-93-5437-645-0, 28-29 January 2021, Kolkata.

Solar based portable mobile power bank system by **Mrinmoy Dutta, Saswati Chatterjee, Nabamita Paul, Santana Das**, Chandrika Bhattacharyya, International Conference on Frontiers in Engineering, Management and Applied Science, (FEMAS 2021), ISBN No: 978-93-5437-645-0, 28-29 January 2021, Kolkata.

IoT based colour sorting machine by **Suparna Maity**, Sudipta Dey, Debdipta Bhunia, Rohan Dutta, Asif Nadeem, Anisha Chowdhury, International Conference on Frontiers in Engineering, Management and Applied Science, (FEMAS 2021), ISBN No: 978-93-5437-645-0, 28-29 January 2021, Kolkata.

DEPARTMENT: ASHU

International Journal

Dr. Indrajit Bose, “Sunlight on the Water: Arthur Ransome’s Book Illustrations”, SETU Journal, Pittsburgh, U.S.A., July-2020.

PUBLICATIONS

Dr. Sucharita Bhattacharyya & Dr. Anup Kumar Thander , “Conventional Education & Online Education in Engineering: A Case Study“ published in Journal of Physics (Conference Series) ” (IOCER 2020), 1797(2021)012069 , doi:10.1088/1742-6596/1797/1/012069, IOP Publishing Ltd. UK, March 2021. Scopus Indexed, Impact Factor 0.55, ISSN : 17426588, March 2021.

Dr. Anup Kumar Thander & Dr. Sucharita Bhattacharyya, “TM mode analysis in rib structured optical Wave-Guide” is accepted (from ICCDN 2020) and to be published in Springer as LNEE database with Scopus indexing.

Dr. Mainak Debnath, Dr. Indrajit Bhattacharyya, Dr. Sreyasree Basu and Mr. Chandan Kumar Bhattacharyya, :Food colour: Boon or Ban”, The Pharma Innovation Journal 2020; SP-9(12): 86-92

Dr. Soma Mukherjee “Communicated to Acta Biomaterialia (Elsevier)”.

International Conference

• **Dr. Soma Mukherjee** in “International Web Conference on Recent Advances in Nanoscience & Nanotechnology for High-end Applications (IWCRANHA 2020)” from 25.7.20 to 26.7.20 held in ASHU, Assam University, Silchar in association with The society for Technologically Advanced Materials of India (STAMI).

Dr. Soma Mukherjee :“Renewable Energy: Physics involved & its prospect” in International Conference on Environment and sustainable development (ICESD-2021) from 27to 28th Feb 2021 organised by Dept of ASHU, GNIT

• **Dr. Soma Mukherjee** :“Application of Physics for health care” in International Conference on Environment and sustainable development (ICESD-2021) from 27to 28th Feb 2021 organised by Dept of ASHU, GNIT

• **Dr. Soma Mukherjee**: “Physics in Medical World” in International Conference on Environment and sustainable development (ICESD-2021) from 27to 28th Feb 2021 organised by Dept of ASHU, GNIT

Dr. Soma Mukherjee:“Materials for sustainable development” in International Conference on Environment and sustainable development (ICESD-2021) from 27to 28th Feb 2021 organised by Dept of ASHU, GNIT

Dr. Sucharita Bhattacharyya in “IOCER, 2020” from 8.10.2020 to 9.10.2020.

National Conference

PUBLICATIONS

Dr. Soma Mukherjee in “3rd National Conference on Science, Technology and Communication Skills (NCSTCS 2K20)” from 25.09.2020 to 26.09.20 held in Dept. of Basic Science & Humanities, Narula Institute of Technology. Published in Proceedings of the conference by Ideal International E- publication Pvt. Ltd, ISBN: 978-93-89817-42-3, page 77

Sourav Majumdar in STTP on Recent Trends in "Internet of Things (IoT) and Embedded System Based Monitoring and Control of Distributed Generation" (Phase-II) from 24-08-2020 to 29-08-2020 held in Dept. of EE, Narula Institute of Technology.

DEPARTMENT: CA

International Journal

Somalina Chowdhury, Santanu Kr. Sen, " Smart Meter using Big Data in IoT", Impact factor 1.0, published in international Journal of Engineering and Advanced Technology (IJEAT) at Volume-10 Issue-1 value of citation 6.02 [Scopus Indexed].

Somalina Chowdhury, Santanu Kr. Sen, "Cloud computing in IoT based on Smart Meter", Impact factor 1.0, published in international Journal of Engineering and Advanced Technology (IJEAT) at Volume-10 Issue-1 value of citation 6.02 [Scopus Indexed].

PUBLICATIONS

STUDENT PUBLICATION

2020-21	FT	0	0	15	0	15
	AEIE	0	0	1	3	4
	IT	0	0	0	3	3
	CSE	0	0	0	4	4
	EE	0	0	1	2	3
	ECE	0	0	7	7	14
	ASHU	0	1	0	13	14
	CA	0	0	0	0	0
		0	1	24	32	57

DEPARTMENT: CSE

International Conference

Subhajit Pati, Sourav Mallick, Snehashis Chakraborty, Rajbinder Kaur, “A regression model frame with IoT to predict covid zone” Accepted in (31st July-2020) International Online Conference on Engineering Response to COVID- 19 (IOCER COVID-19) organize by JIS College of Engineering on 8th and 9th October 2020 (Conference proceedings will be published in Journal of Physics: Conference Series indexed in SCOPUS, as well as EI Compendex and Inspec)

Ankita Adhikari, Ashesh Roy Choudhuri, Debanjana Ghosh, Neela Chattopadhyay, “Breast Cancer Histopathological Image Classification using Convolutional Neural Networks”, International Conference on Innovations in Software Architecture and Computational Systems (ISACS - 2021) on 2-3 April, 2021 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Amlan Dutta, Abhijit Pal, Mriganka Bhadra, Md Akram Khan, “ An Improved K-Means Algorithm for Effective Medical Image Segmentation”, International Conference on Innovations in Software Architecture and Computational Systems (ISACS - 2021) on 2-3 April, 2021 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Subhajit Pati, Snehashis Chakraborty, Soumik Sarkar, SubarnaGuin, Sourav Mallick,” A Framework for Predicting Placement of a Graduate using Machine Learning Techniques”,International Conference on Innovations in Software Architecture and Computational Systems (ISACS - 2021) on 2-3 April, 2021

(Proceedings will be published through Springer book series “Studies in Automatic, Data-driven and Industrial Computing”, Scopus Index).

DEPARTMENT: ECE

International Journal

Ayushi Bhawal, Debaparna Dasgupta, Arka Ghosh, Koyena Mitra, “Arduino Based Hand Gesture Control of Computer” International Journal of Engineering Science and Computing (IJESC), vol. 10, no. 6, 15th June 2020.

Jayita Pramanik, Poushali Paul, Sneha Baidya and Tias Ghosh, “Controlling Railway Gates Using Automata Based Intelligent Controller”, International Journal of Innovative Research in Technology (IJIRT), vol. 7, Issue 11, pp. 513- 518, 11th April 2021. ISSN: 2349-6002.

Adrija Kundu, Avirup Mondal , Ananya Biswas, Bikram Saha, Palabi Ghosh , Smart Stick for Blind using IoT", in International Journal of Innovative Research in Technology.

Ayon Maji,Atanu kumar Bagh, Ankan Das, Anurima Majumdar, Antara Ghosal, Palasri Dhar, Sunipa Roy, "PADMINI-An Intelligent Women Safety Device " in INTERNATIONAL RESEARCH JOURNAL OF SCIENCE ENGINEERING AND TECHNOLOGY.

Sayan Mondal , Sayan Majumder , Sayan Bhattacharjee, Satish Singh , Uddipan Chowdhury, "Thermal Scanning & GPS Tracking System" in International Journal of Innovative Research in Technology.

Hridika Saha”, Ballistic and scattering limited mobility in GaN Single quantum well and Al_{0.25}Ga_{0.75}N/GaN superlattice MOSFET: A Comparative Study”.IJCRT.

Soham Bhattacharya,Subhayan Moitra, Sufal Das, Suparna Biswas, Sayan Roy Chaudhuri, Palasri Dhar, Dyuti Nandi,Sulata Pandit, “Designing of Automatic Car Parking System”, International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653 ,VOL: 8,NOV 2020.(Google Scholar and UGC Approved.)

International Conference

Rohan Kumar Banerjee, Ankita sarkar, Suparna Biswas, Palasri Dhar, Aвали Banerjee, Sayan Roy Chowdhuri, “Real Time Object Detection using YOLO Algorithm”, International Conference on Frontiers in Engineering, Management and Applied Science (FEMAS 2.0) -2021, Guru Nanak Institute of Technology, Kolkata, 28-29th January 2021. ISBN No: 978-93-5437-645-0

Sanchari Saha, Wriju Banerjee, Tathagata Bhattacharyya, Saswata Sundar

PUBLICATIONS

Maity, “Facial and Voice Recognition Based Security and Safety System in Car”, IEEE 8th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO'2020) (Trends and Future Directions), Technically Co-Sponsored by IEEE UP Section (India), Amity University, Noida, 4th - 5th June, 2020. Electronic ISBN: 978-1-7281-7016-9 DOI: 10.1109/ICRITO48877.2020.9197886.

Avali Banerjee, **Sangeeta Rana, S. B. Amreen Saba, Samayita Chakraborty**, “Bionic Eye-A Review”, IEEE 8th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO'2020) (Trends and Future Directions), Technically Co-Sponsored by IEEE UP Section (India), Amity University, Noida, 4th - 5th June, 2020. Electronic ISBN: 978-1-7281-7016-9 DOI: 10.1109/ICRITO48877.2020.9197834

Wriju Banerjee, Sanchari Saha, Saswata Sundar Maity, Tathagata Bhattacharyya and Subhrajyoti Sadhu, and Suparna Biswas “GPS Tracking, QR code Scanner Based Application to Help the Health Workers and Common Citizens during Covid-19”, Proc. of IOCER 2020 Conference, 8-9th October 2020, JISCE Kalyani.

Senjuti Mazumdar, Sangeeta Rana, S.B. Amreen Saba, Suparna Biswas, Palasri Dhar and Sayan Roy Chaudhuri, “Face Detection based approach to combat with COVID-19”, Proc. of IOCER 2020 Conference, 8-9th October 2020, JISCE Kalyani.

Piyal Bose, Arko Saha, Aritra Ghosal, Arjyama Seal, Bikram Paul And Surajit Basak, “COVID FRONTLINER: A First Level Smart Health Assistant App & Website for Covid 19”, 28-29th Jan., 2021, FEMAS 2.0-2021.

Ayusha Biswas, Arpan Bhawal, Sayan Roy Chaudhuri, Suparna Biswas “AIR CONDITIONER SYSTEM CONTROL USING FUZZY LOGIC”, International Conference on Frontiers in Engineering, Management and Applied Science (FEMAS 2.0) -2021, Guru Nanak Institute of Technology, Kolkata, 28-29th January 2021. ISBN No: 978-93-5437-645-0

DEPARTMENT: FT

International Journal

Rajdeep Chakraborty, Ayan Malakar, Parna Sarkar, “Organizing The Un-organized: An Overview of COVID-19 Impact On FMCG Sector and Indian Economy”, **International Journal of Application or Innovation in Engineering & Management (IJAIEM)**, DOI:10.26484, ISSN:2319-4847, Volume: 9, Issue: 7, Pg: 62-69, July 2020. Thompson Reuters Researcher ID: N-6095-2015, **Scopus indexed**

Soumily Misra, Somdeepa Bhattacharya, Arnab Mukherjee and Arunaun-su Shee, “A Review on Utilization of Biosensors for Detection of

Adulteration in Fish”International Journal for Modern Trends in Science and Technology (IJMTST), Web of Science ResearcherID [AAJ-4390-2020](#), Impact Factor-4.124 **UGC Gazette Régulations (Journal Id: 43137)**ISSN: 2455-3778, 6(10):50-55, 2020.

Mariya Mukherjee, Pulak Deb, Akash Biswas, Riya Kumari Gope, Sweta Das, “Study On The Fortification Techniques Of Multiple Food Products Using Immunity Boosting Micronutrients And Antioxidants: A Literature Review” , International Journal of Engineering Applied Sciences and Technology, 5(6):163-169, ISSN No. 2455-2143, 2020, **Impact Factor: 4.982, DOI: 10.33564, H-index: 6**

Supriti Manna, Dabasmitta Saha, Subham Roy Chowdhury, “Onion Productivity and Price Change Aspects in India: An Overview”, International Journal for Modern Trends in Science and Technology (IJMTST) Web of Science Researcher ID [AAJ-4390-2020](#). **Impact Factor- 4.124**. *UGC Gazette Régulations (Journal Id: 43137)*ISSN: 2455-3778, 6(10):118-122, 2020.

Debdatta Sarkar, Bisakha Saha, Arunima Singha “Overview of worldwide potato production scenario with special focus in India and its industrial utilization”, International Journal for Modern Trends in Science and Technology (IJMTST). International Journal for Modern Trends in Science and Technology (IJMTST) Web of Science Researcher ID [AAJ-4390-2020](#). **Impact Factor- 4.125**. *UGC Gazette Régulations (Journal Id: 43137)*ISSN: 2455-3778.

Srijeeta Saha, “A review on Anthocyanin Pigmentwith Respect to It’s Nutraceutical Properties”, International Journal for Modern Trends in Science and Technology (IJMTST). International Journal for Modern Trends in Science and Technology (IJMTST) Web of Science Researcher ID [AAJ-4390-2020](#). **Impact Factor- 4.125**. *UGC Gazette Régulations (Journal Id: 43137)*ISSN: 2455-3778, Volume 6, Issue 12, December 2020.

Avisikta Ghosh Dastidar, Swagatalakshmi Chakraborty, “Entomophagy: A Future Feed Security System”, International Journal for Modern Trends in Science and Technology (IJMTST).). International Journal for Modern Trends in Science and Technology (IJMTST) Web of Science Researcher ID [AAJ-4390-2020](#). Impact Factor- 4.125. *UGC Gazette Régulations (Journal Id: 43137)*ISSN: 2455-3778, Volume 6, Issue 12, December 2020.

Writtika Das, Sweta Das, A Review on Cocoa Butter Alternatives in Chocolate Preparation, International Journal for Modern Trends in Science and Technology, impact factor: 4.175, DOI: <https://doi.org/10.46501/IJMTST070130>, Web of Science ResearcherID AAJ-4390-2020, UGC Journal ID: 43137, ISSN: 2455-3778, 7(01): 135-140, January, 2021,

Nibedita Chowdhury, Rupsa Sengupta, Saurjaynee Biswas, Deborima Bera, Microbial Spoilage of Meat and It's Detection - A Review, International Journal of Modern Science and Technology, www.ijmst.co. ISSN: 2456-0235, 6(2-3):23-30. February, 2021.

Parag Chattopadhyay, Aditya Paul, Samridhya Paul, Sukanya Ray, Detection Methods of Non-permitted Food Color, Metanil Yellow: A Review, International Journal for Modern Trends in Science and Technology, impact factor: 4.175, DOI:<https://doi.org/10.46501/IJMTST0703033>, <http://www.ijmtst.com/vol7issue03.htm>, Web of Science ResearcherID AAJ-4390-2020, UGC Journal ID: 43137, ISSN: 2455-3778, 7(03): 201-204, March, 2021.

Riya Kumari Gope, Application Of Artificial Intelligence In Food Industry— A Review, Vol. 5, Issue 11, ISSN No. 2455-2143, Pages 145-152, 2021, IJEAST (<http://www.ijeast.com>), March 2021

Saurjaynee Biswas, Nibedita Chowdhur, Ishon Mollick, Deborima Bera, Sandip Kumar Karmakar, Detection and Estimation of Metanil Yellow & Congo Red: Carcinogenic Food Colourants, Present in Different Food Samples, International Journal for Modern Trends in Science and Technology, ISSN: 2455-3778 online, DOI:<https://doi.org/10.46501/IJMTST0705007>, Available online at:<http://www.ijmtst.com/vol7issue05.html>, impact factor: 4.175, 7(05): 49-55, May, 2021.

Joyita Mallik, Neha Das, Keya Roy, “An Overview Of Various Types Of Banana Production And Its Market Value In India”, International Research Journal of Engineering and Technology (e-ISSN: 2395- 0056, p-ISSN: 2395-0072) Volume: 07, Issue: 12, Pg: 1195-1204, Available online DOI: <https://irjet.net/volume7-issue12>, December 2020, Thompson Reuters indexed.

Shalini Chanda, Shramana Sarkar, Sourini Sen, Swarnendu Ghosh, “An Overview of Rice Productive Cultivation and Variety in India” International Research Journal of Engineering and Technology (e-ISSN: 2395- 0056, p-ISSN: 2395-0072) Volume: 07, Issue: 12, Pg: 1195-1204, Available online DOI: <https://irjet.net/volume7-issue12>, December 2020, Thompson Reu-

ters indexed.

Indrabati Bose, Ritam Ghosh, Madhurima Sarkar, Madhurima Kundu, “Betel Leaf: The Ignored Green Gold”, ADALYA JOURNAL (ISSN NO: 1301-2746), Web of Science group journal, Volume: 10, Issue: 4 Pg: 1-19, 2021, available online: DOI: <https://doi.org/10.37896/aj10.4/001>, April 2021

DEPARTMENT: EE

International Journal

Subharshi Roy, Debanjan Chatterjee, “Cloud based Real-time Vibration and Temperature Monitoring System for Wind Turbine”, AI and IOT in renewable energy, Publisher: Springer Nature, Singapore Series: Studies in Infrastructure and Control, 7th January, 2021. (Book Chapter) published by Springer Nature. <https://www.springer.com/gp/book/9789811610103>

International Conference

Rohan Sengupta, Sayak Chowdhury, Sarnendu Sarkar, Amartya Dutta Banik, “Power Efficient Mini Inverter”, International Conference on Frontiers in Engineering, Management and Applied Science (FEMAS 2021), Guru Nanak Institute of Technology, Kolkata, 28-29th January.

Subharshi Roy, Debanjan Chatterjee, Bikram Das, “Cloud-based Real-time Vibration and Temperature Monitoring System for Induction Motor, 3rd International Conference on Computational Advancement in Communication Circuit and System (ICCACCS 2020), Narula Institute of Technology, Kolkata 17th -19th December, 2020.

DEPARTMENT: IT

International Conference

Akash Gupt “APPROXIMATE COMPUTING: ERROR TOLERANT ADDER” International Conference on Applications of Networks, Sensors and Autonomous Systems Analytics (ICANSASA 2020). Organized by JIS College of Engineering on 11th & 12th December 2020 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Sumit Choudhary, Subhra Sarkar "A Low-Latency Scheme Using Real-time Constraints for V2V Communication in VANET" International Conference on Applications of Networks, Sensors and Autonomous Systems Analytics (ICANSASA 2020). Organized by JIS College of Engineering on 11th &

PUBLICATIONS

12th December 2020 (Proceedings will be published through Springer book series “Studies in Autonomic, Data-driven and Industrial Computing”, Scopus Index).

Arkajyoti Chakraborty, “Clustered Fault Repairing Architecture for 3D ICs Using Redundant TSV”, First International Conference on Innovations in Software Architecture and Computational Systems (ISACS-2021) organized by Department of Computer Science & Engineering, Guru Nanak Institute of Technology, JIS Group, from 2nd -3rd April, 2021, Conference Proceedings will be published in **Springer Lecture Notes** in Networks and Systems

DEPARTMENT: AEIE

International Journal

Shilpita Hazra, **Bapita Roy**, **Paramita Banerjee**, Sayani Dey, Sonali Das, "Non-Contact Estimation of Surface Roughness", Pramana Research Journal, UGC approved Journal, Volume 10, Issue 8, 2020, pp - 48-55. ISSN NO: 2249-2976, August-2020.

International Conference

Biomedical data integration system by **Anirban Saha**, **Atreyee Das**, Bapita Roy, Paramita Banerjee, Mrinmoy Dutta, International Conference on Frontiers in Engineering, Management and Applied Science, (FEMAS 2021), ISBN No: 978-93-5437-645-0, 28-29 January 2021, Kolkata.

WSN based smart air pollution monitoring system by **Shilpita Hazra**, **Sakya Mridha**, **Sampreet Dey**, Ms.Saswati Chatterjee, Ms.Bapita Roy, International Conference on Frontiers in Engineering, Management and Applied Science, (FEMAS 2021), ISBN No: 978-93-5437-645-0, 28-29 January 2021, Kolkata.3. Design of economical & efficient solar power conversion system using buck boost converter by Sampreet Dey, Ms. Santana Das, Aishik Dutta, Avisek Bardhan, Joyshikhar Saha, International Conference on Frontiers in Engineering, Management and Applied Science, (FEMAS 2021), ISBN No: 978-93-5437-645-0, 28-29 January 2021, Kolkata.

Smart energy meter by **AnirbanSaha**, **Subhajit Kr Hooi**, **Subha Deb**, **Atreyee Das** ,Suparna Maity, International Conference on Frontiers in Engineering, Management and Applied Science, (FEMAS 2021), ISBN No: 978-93-5437-645-0, 28-29 January 2021, Kolkata.

DEPARTMENT: ASH

National Conference

Dr. Soma Mukherjee with **Cheryl Mukherjee**, **ShuvamPatra**,: “Solar Tree” in “3rd National Conference on Science, Technology and Communication Skills (NCSTCS 2K20)”from 25.09.2020 to 26.09.20 held in Dept.of Basic Science & Humani-

ties, Narula Institute of Technology. Published in Proceedings of the conference by Ideal International E- publication Pvt. Ltd, ISBN: 978-93-89817-42-3, page 77

International Conference

Dr. Soma Mukherjee with **Cheryl Mukherjee, Shuvam Patra**, Conference paper (NCSTCS 2K20) In press,2020

Dr. Sucharita Bhattacharyya with **Anwesh Bhowmick**, Book Chapter (International) Revision Submitted (CRC Press),2020

Dr. Sucharita Bhattacharyya with **Jatin Madan, Richa Sharma, & Hashmeet Kaur Pandher** , in ICESD 2021 during (27-28) February, 2021 , the paper entitled *Control in Global Warming : Role of Carbon Capture* (to be published)

Dr. Sucharita Bhattacharyya with **Saptarshi Dey, Suparna Das, Ankita Basu, & Rupak Biswas** in ICESD 2021, during (27-28) February, 2021, the paper entitled *Wind hydro energy at remote Islands in southeast Asia - A case study of Andaman and Nicobar islands* (to be published)

Suchandrima Mukherjee, Dr. Sreyasree Basu, Dr. Indrajit Bhattacharyya and Dr. Mainak Debnath, in ICESD 2021, during (27-28) February, 2021, the paper entitled "Bioplastics: A Remedy to make the World Plastic Free" (to be published).

Sukriti Dutta , Supriti Manna , Swarnendu Ghosh, Sweta Das, Dr. Sreyasree Basu and Dr, Indrajit Bhattacharyya, in ICESD 2021, during (27-28) February, 2021, the paper entitled "Food Waste Management: An Environmental Concern" (to be published).

Sankhadeep Das, Anisha Roy, Dr. Sreyasree Basu, Dr. Mainak Debnath and Mr. Chandan Kumar Bhattacharyya, in ICESD 2021, during (27-28) February, 2021, the paper entitled "Role of Spectroscopy in Pollution Monitoring " (to be published).

Oindrila Mazumdar, Dr. Sreyasree Basu and Dr. Mainak Debnath, in ICESD 2021, during (27-28) February, 2021, the paper entitled "Edible Food Packaging: a New way to Sustainability" (to be published).

- **Pratik Bandyopadhyaya, Soumyadeep ghosh, Shubhadeep Bhowmik, Sayak Chowdhury**, Dr. Indrajit Bhattacharyya and Mr. Chandan Kumar Bhattacharyya, in ICESD 2021, during (27-28) February, 2021, the paper entitled "E waste Management: An Environmental Concern" (to be published).

PUBLICATIONS

- Dr. Soma Mukherjee with **Shreya Dan, Arghadip Biswas, Sanlap Ghosh, and Adrija Saha**: “Renewable Energy: Physics involved & its prospect” in International Conference on Environment and sustainable development (ICESD-2021) from 27 to 28th Feb 2021 organised by Dept of ASHU, GNIT
- Dr. Soma Mukherjee with **Ritabrata Banerjee, Pratik Roy, Aditya Manna, Raunak Seal** and Soumi Patra: “Application of Physics for health care” in International Conference on Environment and sustainable development (ICESD-2021) from 27 to 28th Feb 2021 organised by Dept of ASHU, GNIT
- Dr. Soma Mukherjee with **Arnab Chowdhury, Artija Ganguly and Vaskar Paul**: “Physics in Medical World” in International Conference on Environment and sustainable development (ICESD-2021) from 27 to 28th Feb 2021 organised by Dept of ASHU, GNIT
- Dr. Soma Mukherjee with **Anushka Sarkar, Souvik Sarkar, Mriganka Banerjee** and Soumi Patra: “Materials for sustainable development” in International Conference on Environment and sustainable development (ICESD-2021) from 27 to 28th Feb 2021 organised by Dept of ASHU, GNIT

Committee List

Members of Board of Governors

Sl. No.	Name of Member of BOG	Position in the current engagements
1	Dr. S.M.Chatterjee	Chairman- Advisor, State Council of Technical Education, Former Vice-Chancellor Bengal Engineering & Science University
2	Mr. Taranjit Singh	Managing Trustee
3	Mr. Haranjit Singh	Trustee Member
4	Mr. Amrik Singh	Trustee Member
5	Mr. Harjyot Singh	Member, Nominated by Trust
6	Mr. Amanjyot Singh	Member, Nominated by Trust
7	Mr. Simarpreet Singh	Director, JIS Group Educational Initiative
8	Mr. U. S.Mukherjee	Dy. Director, JIS Group; Member, Nominated by Trust
9	Dr. Sourav Dutta	Industry representative (Chief Product Officer, Pay-Back, Gurgaon)
10	Prof. Malay Chatterjee	MAKAUT Nominee
11	Dr. Amalendu Basu	Director of Technical Education (Ex-Officio), Govt. of WB
12	Mr. Jagadish Chanda	WB Govt. Nominee
13	AICTE Regional Officer	Member Representative, AICTE ERO
14	Prof(Dr.) Arun Kr. Mondal	Professor, ECE Dept and COE, Teacher Representative
15	Mr. Adhish Kr. Chakrabarty	Member, Asst. Professor, AEIE Dept., Teacher Representative
16	Prof(Dr.) Asit Guha	Advisor, JIS Group ;Member, Nominated by Trust
17	Mr. S. S. Dutta Gupta	Director, JIS Group
18	Prof(Dr.) Santanu Kr. Sen	Principal & Member Secretary

Committee List

GNIT ACADEMIC COUNCIL

1. Prof.(Dr.) Santanu Kumar Sen
2. Dr. Sucharita Bhattacharyya

Members

3. Prof. (Dr.) Arun Kumar Mondal
4. Dr. Barnali Kundu
5. Dr. Sunipa Roy
6. Mr. Chiranjeeb Dutta
7. Dr. Sucharita Chakrabarti
8. Mrs. Bapita Roy
9. Mr. Sudip Ghosh
10. Dr. Kakali Bandyopadhyay
11. Dr. Sangeeta Bhattacharya
12. Dr. Indrajit Bose
13. Mrs. Srabani Kundu
14. Dr. Adhish Kr. Chakrabarty

External Members

15. Prof.(Dr.) Amalendu Ghosh
16. Mr. Indranil Roy Chowdhury
17. Prof.(Dr.) Joydeep Chowdhury :
18. Prof.(Dr.) Sudhabindu Ray
19. Prof. (Dr.) Konika Das Bhattacharjee
20. Prof. (Dr.) Runu Chakraborty
21. Prof. (Dr.) Rajat Kumar De

- : Principal & Chairman
- : Associate Professor & Member Secretary

- : Professor and COE, GNIT
- : HOD, EE Dept.
- : HOD, ECE Dept.
- : HOD, CA Dept
- : HOD, ASHU Dept
- : HOD, AEIE Dept
- : HOD, IT Dept.
- : HOD , FT Dept
- : HOD, CSE Dept
- : Asst. Prof. , ASHU Dept.
- : Asst. Prof. , CSE Dept.
- : Registrar, GNIT

- : Civil Engineering Department, IEST (Invitee)
- : Senior Project Manager, CTS (Invitee)
- : Jadavpur University Department of Physics
- : Jadavpur University , ECE Dept
- : IEST, Electrical Engineering Department , IEST,
- : Jadavpur University, Dept. of Food Technology
- : Machine Intelligence Unit, Indian Statistical Institute, Kolkata

Committee List

Others Institutional Committee

Examination Committee

Finance Committee

Anti-Ragging Committee

Grievance Redressal Committee

Disciplinary Committee

Sports Committee

Cultural Committee

R&D Committee

Library Committee

Women grievance Redressal committee

Publicity/Magazine Committee

Student Welfare Committee

Class monitoring Committee

Publicity and Website Committee

Routine Committee

IQAC Cell

List of Participants in FDP, STTP, Hands on Session, Workshop in 2020-2021

Sl. No.	Name of teacher who attended the program	Title of the program	Duration (from – to) (DD-MM-YYYY)
1	Dr. Suranjan Ghose	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
2	Dr. Suman Bhattacharya	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
3	Dr. Mahamuda Sultana	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
4	Dr. Sangeeta Bhattacharya	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
5	Dr. Rupak Chakraborty	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
6	Dr. Amrut Ranjan Jena	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
7	Dr. Ananjan Maiti	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
8	Mr. Moloy Dhar	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
9	Mrs. Srabani Kundu	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
10	Miss Ipsita Saha	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
11	Ms. Mandira Banik	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
12	Mr. Sourish Mitra	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
13	Ms. Sayani Chandra	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
14	Mr. Rafiqul Islam	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
15	Ms. Bidyutmala Saha	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
16	Mr. Nirupam Saha	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
17	Miss Pallabi Das	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
18	Mr. Krishnendu Chowdhury	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
19	Ms. Masuma Sultana	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
20	Ms. Ahana Ghosh	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020

List of Participants in FDP, STTP, Hands on Session, Workshop in 2020-2021

21	Mr. Abhijit Mitra	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
22	Mr. Abhirup Sinha	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
23	Mr. Ayan De	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
24	SAYAN ROY CHAUDHURI	ONE WEEK STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
25	DR. AVALI BANERJEE	ONE WEEK STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
26	DR. SURAJIT BASAK	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
27	DR. SOUMIK PODDER	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
28	Koushik Pal	FDP ON NON-VOLATILE MEMORY TECHNOLOGIES AND NANO BIO SENSORS	17-11-2020 - 24-11-2020
29	Dr. Arun Kumar Mondal	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
30	Dr. Sekhar Ranjan Bhadra Chowdhury	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
31	Dr. Kaushik Roy	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
32	Dr. Pijush Kanti Bhattacharjee	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
33	SWAGATA BHATTACHARYA	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
34	Dr. Sunipa Roy	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
35	Dr. Nabaneeta Banerjee	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
36	Soma Boral	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
37	Ms. Antara Ghosal	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING BY ECE DEPT GNIT	11-08-2020 - 15-08-2020
38	Ms. Anurima Majumder	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING BY ECE DEPT, GNIT	11-08-2020 - 15-08-2020
39	Mr. Kaustav Madhab Chatterjee	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
40	Mr. Ajoy Sen	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
41	Ms. Enakshi Basak	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
42	Ms. Suranjana Saha	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
43	Mr. Shouvik Sarkar	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
44	Mr. Tamojit Saha	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020

List of Participants in FDP, STTP, Hands on Session, Workshop in 2020-2021

45	Mr. Subhabrata Dhar	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
46	Mr. Shatadru Biswas	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
47	Ms. Aditi Mandal	FDP ON NON-VOLATILE MEMORY TECHNOLOGIES AND NANO BIO SENSORS	17-11-2020 - 24-11-2020
48	Dr. Suparna Biswas	FDP ON NON-VOLATILE MEMORY TECHNOLOGIES AND NANO BIO SENSORS	17-11-2020 - 24-11-2020
49	Dr. Sisir Kumar Das	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
50	Mr. Shubhadeep Biswas	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
51	Ms. Sutapa Biswas	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
52	Ms. Palasri Dhar	FDP ON NON-VOLATILE MEMORY TECHNOLOGIES AND NANO BIO SENSORS	17-11-2020 - 24-11-2020
53	Chowdhury Md Mizan	FDP ON IMPLEMENTATION OF MACHINE INTELLIGENCE TOWARDS DIGITAL INDIA	22-06-2021 - 26-06-2021
54	Mr. Arnab Banerjee	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
55	DR. MOUMITA DAS	FDP ON IMPLEMENTATION OF MACHINE INTELLIGENCE TOWARDS DIGITAL INDIA	22-06-2021 - 26-06-2021
56	Mr. Subhabrata Dutta	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
57	Mr. Raja Dastidar	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
58	SUDEEP GHOSH	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
59	SUPARNA KARMAKAR	FDP ON ELECTRONIC DEVICES, IMAGE PROCESSING AND MACHINE LEARNING	11-08-2020 - 15-08-2020
60	TRIDIB CHAKRABORTY	FDP ON PYTHON AND IOT	14-12-2020 - 18-12-2020
61	TRISHITA GHOSH	FDP ON MACHINE LEARNING AND ITS APPLICATIONS	21-06-2021 - 25-06-2021
62	Ms. Bapita Roy	WORKSHOP ON MACHINE LEARNING AND STEGANOGRAPHY	04-08-2020 - 05-08-2020
63	Ms. Rajanya Chakraborty	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
64	Dr. Paramita Banerjee	ATAL FDP ON CONTROL SYSTEMS & SENSORS TECHNOLOGY	02-11-2020 - 06-11-2020
65	Mr. Soumya Deb Bag	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
66	Miss Sushmita Roy	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
67	Dr. Adhish Kumar Chakraborty	AICTE SPONSORED STTP ON IOT & ADVANCED POWER ELECTRONICS APPLICATIONS IN SMART GRID PHASE-II	31-08-2020 - 02-09-2020
68	SANTANA DAS	ATAL FDP ON GREEN TECHNOLOGY AND SUSTAINABILITY ENGINEERING	05-10-2020 - 09-10-2020
69	Dr. Anil Ghoshal	FDP ON RENEWABLE ENERGY SOURCES	07-12-2020 - 11-12-2020

List of Participants in FDP, STTP, Hands on Session, Workshop in 2020-2021

70	Mr. Sudip Kuila	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
71	Suparna Maity	FDP ON ARTIFICIAL INTELLIGENCE USING PYTHON	14-09-2020 - 19-09-2020
72	DOLANCHAPA SIKDAR	FDP ON HARNESSING THE KNOWLEDGE OF VALUE ADDITION NETWORK IN FOOD TECHNOLOGY	08-06-2021 - 12-06-2021
73	Dr. Kakali Bandyopadhyay	AICTE TRAINING AND LEARNING (ATAL) ACADEMY ONLINE ELEMENTARY FDP ON RECENT TRENDS IN CHEMICAL AND ALLIED INDUSTRIES	21-06-2021 - 25-06-2021
74	Ms. Rosalin Nath	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
75	Mrs. Shairee Ganguly	ONLINE STTP ON TRENDS AND PROSPECTS OF BIOREFINERY, UNDER TEQIP III	10-06-2021 - 14-06-2021
76	Dr. Deborshi De	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
77	Saikat Mazumder	AICTE TRAINING AND LEARNING (ATAL) ACADEMY ONLINE ELEMENTARY FDP ON INNOVATION MANAGEMENT FOR NURTURING ENTREPRENEURSHIP CULTURE IN EDUCATIONAL INSTITUTES	21-06-2021 - 25-06-2021
78	Ms. Madhumita Saha	STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATIONS	07-12-2020 - 12-12-2020
79	Shiladitya Ghosh	FDP ON HARNESSING THE KNOWLEDGE OF VALUE ADDITION NETWORK IN FOOD TECHNOLOGY	08-06-2021 - 12-06-2021
80	Ms. Kaninika Paul	FDP ON HARNESSING THE KNOWLEDGE OF VALUE ADDITION NETWORK IN FOOD TECHNOLOGY	08-06-2021 - 12-06-2022
81	Ms. Aditi Protiher	ONLINE FACULTY DEVELOPMENT PROGRAMME ON TRACING THE CONTOURS OF THE NEW NORMAL: POST COVID-19	11-08-2020 - 16-08-2020
82	Mrs. Rupa Basu Mitra	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
83	Ms. Shreyasi Bhattacharya	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
84	Mr. Chiranjib Dutta	FDP ON IMPLEMENTATION OF MACHINE INTELLIGENCE TOWARDS DIGITAL INDIA	22-06-2021 - 26-06-2021
85	Mrs. DolaSaha	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
86	Miss Somalina Chowdhury	FDP ON IMPLEMENTATION OF MACHINE INTELLIGENCE TOWARDS DIGITAL INDIA	22-06-2021 - 26-06-2021
87	Mrs. Swati Sarkar	FDP ON IMPLEMENTATION OF MACHINE INTELLIGENCE TOWARDS DIGITAL INDIA	22-06-2021 - 26-06-2021
88	Mr. Suman Nandi	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
89	Mr. Anunay Ghosh	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020

List of Participants in FDP, STTP, Hands on Session, Workshop in 2020-2021

90	Miss Maumita Bhattacharjee	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
91	Dr. Sucharita Bhattacharyya	5-DAYS ONLINE FACULTY DEVELOPMENT PROGRAM ON TRACING THE CONTOURS OF NEW NORMAL: POST COVID-19	11-08-2020 - 16-08-2020
92	Dr. Soma Mukherjee	5-DAYS ONLINE FACULTY DEVELOPMENT PROGRAM ON TRACING THE CONTOURS OF NEW NORMAL: POST COVID-19	11-08-2020 - 16-08-2020
93	Mr. Dipanjan Bhattacharjee	AICTE ATAL ACADEMY ONLINE FDP ON QUANTUM COMPUTING	05-10-2020 - 09-10-2020
94	Mr. Anjan Adak	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
95	Mr. Rajarshi Chakraborty	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
96	Ms. Soumi Patra	5-DAYS ONLINE FACULTY DEVELOPMENT PROGRAM ON TRACING THE CONTOURS OF NEW NORMAL: POST COVID-19	11-08-2020 - 16-08-2020
97	Ms. Monalisa Bhowmik	FDP ON NON-VOLATILE MEMORY TECHNOLOGIES & NANO BIOSENSORS	17-11-2020 - 24-11-2020
98	Dr Indrajit Bose	5-DAYS ONLINE FACULTY DEVELOPMENT PROGRAM ON TRACING THE CONTOURS OF NEW NORMAL: POST COVID-19	11.08.2020 - 16.08.2020
99	Ms. Namrata Chakraborty	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
100	Ms. Tania Ghosh	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
101	Dr. Sucharita Chakrabarti	AICTE SPONSORED QIP ON MATRIX COMPUTATIONS AND ITS APPLICATION IN SYSTEMS, SIGNAL, AND CONTROL PROBLEMS	16-02-2021 - 21-02-2021
102	Dr. Anup Kumar Thander	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
103	Mr. Goutam Mandal	5-DAYS ONLINE FACULTY DEVELOPMENT PROGRAM ON TRACING THE CONTOURS OF NEW NORMAL: POST COVID-19	11-08-2020 - 16-08-2020
104	Ms. Moumita Chaklader	AICTE SPONSORED SHORT TERM TRAINING PROGRAMME ON RECENT TRENDS IN INTERNET OF THINGS (IOT) AND EMBEDDED SYSTEM BASED MONITORING AND CONTROL OF DISTRIBUTED GENERATION	24-08-2020 - 29-08-2020
105	Ms. Sangeeta Biswas	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
106	Dr. Shibendu Biswas	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
107	Mr. Sanjoy Biswas	ONE WEEK ONLINE NATIONAL FACULTY DEVELOPMENT PROGRAM ON E-CONTENTS AND ICT TOOLS FOR INNOVATIVE TEACHING & LEARNING	01-05-2021 - 07-05-2021
108	Miss Stabania Mukherjee	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
109	Mr. Rupam Dey	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
110	Dr. Sreyasree Basu	5-DAYS ONLINE FACULTY DEVELOPMENT PROGRAM ON TRACING THE CONTOURS OF NEW NORMAL: POST COVID-19	11-08-2020 - 16-08-2020

List of Participants in FDP, STTP, Hands on Session, Workshop in 2020-2021

111	Dr. Mainak Debnath	5-DAYS ONLINE FACULTY DEVELOPMENT PROGRAM ON TRACING THE CONTOURS OF NEW NORMAL: POST COVID-19	11-08-2020 - 16-08-2020
112	Dr. Indrajit Bhattacharyya	5-DAYS ONLINE FACULTY DEVELOPMENT PROGRAM ON TRACING THE CONTOURS OF NEW NORMAL: POST COVID-19	11-08-2020 - 16-08-2020
113	Sourav Majumdar	FDP ON ENTREPRENEURSHIP-INNOVATION-IPR-STARTUP	28-06-2021 - 03-07-2021
114	Mr. Sukanta Adhikary	FDP ON IMPLEMENTATION OF MACHINE INTELLIGENCE TOWARDS DIGITAL INDIA	22-06-2021 - 26-06-2021
115	Ms. Sayani Chatterjee	AICTE SPONSORED STTP ON DIGITAL ENERGY NETWORK: IOT APPLICATION IN SMART GRID SYSTEMS	16-06-2021 - 21-06-2021
116	Mr. Subhajit Banerjee	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
117	Ms. Nibedita Saha	FDP ON HARNESSING THE KNOWLEDGE OF VALUE ADDITION NETWORK IN FOOD TECHNOLOGY	08-06-2021 - 12-06-2021
118	Mr. Agniva Das	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
119	Mr. Shantanu Chakravarty	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
120	Mr. Priya Ranjan Das	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
121	Mr. Debayan Mandal	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
122	Mr. Taha Yasin	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
123	Ms. Soumili Bhattacharya	STTP ON GREEN IOT FOR GREEN ENVIRONMENT (PHASE-I)	19-04-2021 - 24-04-2021
124	Mr. Suman Ghosh	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
125	Mrs. Madhumita Chakraborty	5 DAYS FACULTY DEVELOPMENT PROGRAM ON TECHNOLOGICAL ADVANCEMENTS IN ELECTRIC VEHICLE APPLICATIONS	17-08-2020 - 21-08-2020
126	Dr. Barnali Kundu	FDP ON LATEX WITH HANDS ON EXPERIENCE AND INNOVATIVE TEACHING IN DIGITAL ENVIRONMENT	18-08-2020 - 22-08-2020
127	Dr. Anindita Ganguly	FDP ON TECHNOLOGICAL ADVANCEMENTS IN ELECTRIC VEHICLE APPLICATIONS	17-08-2020 - 21-08-2020
128	Mr. Shyamal Kumar Roy	5 DAYS FACULTY DEVELOPMENT PROGRAM ON TECHNOLOGICAL ADVANCEMENTS FOR ELECTRIC VEHICLE APPLICATION	17-08-2020 - 21-08-2020
129	Dr. Jiban Das	5 DAYS FACULTY DEVELOPMENT PROGRAM ON TECHNOLOGICAL ADVANCEMENTS FOR ELECTRIC VEHICLE APPLICATION	17-08-2020 - 21-08-2020
130	Ms. Priyanka Dutta	5 DAYS FACULTY DEVELOPMENT PROGRAM ON TECHNOLOGICAL ADVANCEMENTS FOR ELECTRIC VEHICLE APPLICATION	17-08-2020 - 21-08-2020
131	Dr. Debasree Saha	5 DAYS FACULTY DEVELOPMENT PROGRAM ON TECHNOLOGICAL ADVANCEMENTS FOR ELECTRIC VEHICLE APPLICATION	17-08-2020 - 21-08-2020

List of Participants in FDP, STTP, Hands on Session, Workshop in 2020-2021

132	Ms Rikta Majumder	ONE WEEK ONLINE STTP ON RECENT ADVANCES AND TRENDS IN MACHINE LEARNING: THEORY AND APPLICATION	07-12-2020 - 12-12-2020
133	Mr. Pratyaya Majumdar	5 DAYS FACULTY DEVELOPMENT PROGRAM ON TECHNOLOGICAL ADVANCEMENTS FOR ELECTRIC VEHICLE APPLICATION	17-08-2020 - 21-08-2020
134	Mr. Amit Debnath	FDP ON IMPLEMENTATION OF MACHINE INTELLIGENCE TOWARDS DIGITAL INDIA	22-06-2021 - 26-06-2021
135	Mr. Tuhin Shubra Das	FDP ON TECHNOLOGICAL ADVANCEMENTS IN ELECTRIC VEHICLE APPLICATIONS	17-08-2020 - 21-08-2020
136	Mr. Pritam Chowdhury	FDP ON IMPLEMENTATION OF MACHINE INTELLIGENCE TOWARDS DIGITAL INDIA	22-06-2021 - 26-06-2021
137	Mr. Abhinandan Basak	FDP ON TECHNOLOGICAL ADVANCEMENTS IN ELECTRIC VEHICLE APPLICATIONS	17-08-2020 - 21-08-2020
138	Mr. Susovan Dutta	FDP ON IMPLEMENTATION OF MACHINE INTELLIGENCE TOWARDS DIGITAL INDIA	22-06-2021 - 26-06-2021
139	Dr. Shyamal Ghosh	5 DAYS FACULTY DEVELOPMENT PROGRAM ON TECHNOLOGICAL ADVANCEMENTS FOR ELECTRIC VEHICLE APPLICATION	17-08-2020 - 21-08-2020
140	Dr. Aweek Chattopadhyaya	FDP ON IMPLEMENTATION OF MACHINE INTELLIGENCE TOWARDS DIGITAL INDIA	22-06-2021 - 26-06-2021
141	Mr. Arkadeep Mondal	5 DAYS FACULTY DEVELOPMENT PROGRAM ON TECHNOLOGICAL ADVANCEMENTS FOR ELECTRIC VEHICLE APPLICATION	17-08-2020 - 21-08-2020

Guru Nanak Institute of Technology



HELPLINE

9432012681/9073683911

Guru Nanak Institute of Technology,
157/F, Nilgunj Road, Panihati,
Sodepur, Kolkata - 700114