ANNUAL REPORT
2020-21

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL

Utech

In Pursuit Of Knowledge And Excellence

Maulana Abul Kalam Azad University of Technology West Bengal
Formerly West Bengal University of Technology

NH-12 (old NH-34), Simhat, Haringhata, Nadia, Pin - 741249
BF-142, Sector 1, Bidhannagar, Kolkata, W. B. - 700064

Maulana Abul Kalam Azad University of Technology, West Bengal

(Formerly West Bengal University of Technology)

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From The Desk of the Vice Chancellor

Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal is the nodal University which provides affiliation to more than 200 Colleges spread throughout the state. It is offering courses in Engineering & Technology, Pharmacy, Architecture, Management, Applied & Social Sciences. The University is recognized under Section 2(F) and 12(B) of the UGC Act. The courses offered by the University are approved by the All India Council for Technical Education (AICTE) and UGC. The University, started functioning from the State Archive Building at Shakespeare Sarani and later migrated to its Salt Lake campus at BF 142, Sector I, Salt Lake, Kolkata – 700064. It is now carrying out its academic and administrative activities from its sprawling new academic campus of 40 acres located at Haringhata, Nadia. This main campus was inaugurated by the Hon'ble Chief Minister of West Bengal in 2018. The University is sincerely grateful to the Govt. of West Bengal for providing whole-hearted support in constructing this new campus and thereby fulfilling the cherished dreams of lakhs of stakeholders in having a lush green campus ideal for carrying out varied academic activities. The City Office functions from Salt Lake.

The University, which was initially named West Bengal University of Technology, had its name changed to Maulana Abul Kalam Azad University of Technology, West Bengal on April 6, 2015 by dint of "The West Bengal University of Technology (Amendment) Act, 2015 passed in the West Bengal Legislative Assembly and by the subsequent Government of West Bengal, Law Department Gazette Notification No. 487L – 6th April, 2015.

The University has a twin character: (a) An affiliating University to provide and renewal affiliation to more than 200 Colleges. Such affiliation is granted after duly carrying out the process of inspection, physical or digital, to satisfy about the presence and quality of the infrastructural and human resources, including faculties; to get the students in all the affiliated colleges as well as the In-House courses registered; conduct the examinations; keep an watch on the teaching-learning process; help enhance the employability of the students and encourage them for start-ups. (b) to conduct In-House courses, particularly in different cutting-edge areas of Engineering, Technology, Management, Applied and Social Sciences, run funded projects leading to publications and patents, offer consultancy activities etc. True to its character as a Technological University, MAKAUT, WB is carrying out the practice of digital inspection of the affiliated colleges since last two years to ensure transparency, reduce costs and increase the speed of execution of the process. This initiative has been highly lauded by AICTE.

In every semester, close to 1,50,000 students appear in the examinations held all across the state, around six and half lakhs answer scripts are evaluated digitally and the results are published in around forty days. It may be mentioned that there are around ten thousand teachers in the MAKAUT, WB system comprising more than 200 affiliated Colleges. Most of these answerscripts are evaluated digitally by the teachers after being scanned. The University has embarked upon an ambitious programme to improve the teaching learning process of the students of the MAKAUT family, enhance their employability prospects, and provide a viable linkage with industry and society at large. The University is working in close cohesion with the affiliated colleges to achieve these objectives.

We are putting great emphasis on digital pedagogy through adoption of Massive Open Online Courses (MOOCs) in the curricula, design of bouquet of such courses for Honours Degree, allowing credit transfer using MOOCs, adoption of learning management systems through software and mobile applications. Contemporary methods such as flipped learning, blended learning and similar approaches are being actively practised and patronized by us.

Nikhil Bharat Shiksha Parisad (NBSP) has launched its Massive Open Online Course (MOOC) - "Learn on Go" Campaign through its NBC-MOOCS Mobile Application under the banner of Nikhil Bharat Council for Massive Open Online Course. It is West Bengal's First MOOCs Platform and is under the sole supervision of MAKAUT. Nikhil Bharat Shiksha Parisad is one premier organization with non-profit status; Registered under MCA Govt. of India Section-8. It is founded By Association of Eminent Educators for socio-economic development.

The University is maintaining close linkage with industry to assess the industry needs and preparing the students accordingly for their career development. In other words, the University is following the Education 4.0 model which is the need of the hour. The University has signed a number of Memoranda of Understanding with industry bodies, organizations and other academic institutions for this purpose.

The University has set up seven different Schools of Study and a large number of Departments under these Schools. The Schools are those of Engineering Sciences, Computational Sciences, Natural, Applied and Social Sciences, Biological Sciences, Management Sciences, Energy and Environmental Sciences, Food, Pharmaceutical and Medical Science & Technology.

MAKAUT has started a plethora of new professional courses under these Schools, besides the B.Tech. Courses in CSE and IT. The new courses are in Hotel Management, Hospitality Management, Hospital Management, Media Science, Real Estate Management, Data Science, Analytics, Forensic Science, Digital Marketing etc. In the last academic year, it also opened its door for social sciences like Statistics, Economics and Psychology. Today the job market demands expertise in cutting edge technologies like Artificial Intelligence (AI), Machine Learning (ML), Internet of Things (IoT), Robotics, Data Science, Analytics, Blockchain, Drone

Technology, Virtual Reality/Augmented Reality and the like. We are of the view that these need to be integrated throughout the curricula and across different domains of knowledge.

The University is trying hard to use its vast pool of researchers, faculty members and students to address issues faced by industry and resolve societal problems. We have already identified a number of thrust areas of research in Information Technology, Biotechnology, Materials Science, Food Technology, Media Science etc. which are of industrial and societal relevance. Scholars are being encouraged to pursue research in these areas.

MAKAUT also encourages the faculty members to get involved in patents and IPR-related drives. Through its Technology Business Incubation Centre Ekta, the University is trying to imbibe the spirit of start-up and entrepreneurship among the students. It is partnering with TIFAC to develop certain clusters in different areas of West Bengal.

The faculty members of the University are into active research and the University boasts of a large number of research projects funded by DSTBT, MHRD, CSIR and UGC. The faculty members are being encouraged to align their research activities as per the needs of industry and the society.

This year the Administrative Building at the Haringhata Campus was made operational in the month of May, 2021. The shifting of administration offices was done. Earlier the administrative offices were operational at Biotech Building

One of the most notable achievements of the University in this academic year is an Operating System indigenously developed by the Information Technology (IT) Cell of MAKAUT, WB. Operating System by the University of MAKAUT or OSUM is an open source software that can be used by all free of cost and this will benefit the society to a great extent. OSUM can be installed in modern as well as old computers, many of which are lying idle. Very often modern Operating Systems cannot be installed in such old machines, as these are equipped with low RAM. The USP of OSUM is that it can be installed in computers having 1GB RAM and Dual Core/ Core 2 Duo processors. If old computers are re-used it will also reduce e-waste to a great extent.

The IT Cell developed a software called 'SMRITI Mask Scanner,' which can detect individuals wearing masks incorrectly. Government offices, educational institutions, and other private organisations are in great demand for the programme.

The Cell was also involved in the development of Digital Library, which now has over 2.3 million books. This will allow book lovers to freely access their books from any location on the planet.

The Technology Cell developed Soilless Farming. This farming is the agricultural technology of the future, in which plants are grown and yields are obtained solely via the use of water and no fertiliser.

A VFX Lab is being developed at the Salt Lake Campus of the University. Hardware and software have also been procured for the same.

MAKAUT, WB has also developed its own Internet TV named vTV in the month of June. It makes it possible to view the webinars and workshops on an Internet-enabled device. It is also available in the app format in google play store. Any user can download and install the same for reference.

In order to expand its activities, the University needs more human resources. It has filled up all the vacancies in the officer positions as well as a large number of vacant faculty positions. The University has engaged a number of distinguished academicians and professionals as Adjunct/Visiting Professors as well as a number of bright young teachers on contractual basis to help run the different courses being offered by it. All of them are actively involved in designing the course curricula, setting up the labs and planning for the different courses on offer.

The Academic Session 2020-21 has been remarkable for more than one reason. The University started further expanding and consolidating its In-House academic activities, introducing new programs of study, setting up new laboratories, running online faculty development and management development programmes, undertaking an extensive revision of curricula etc.

Since the beginning of this academic year, the pandemic triggered by corona virus took serious turn and the long phase of lockdown disrupted the normal academic activities. It was followed by the storm Yaas, which ravaged our lives. MAKAUT and its affiliated colleges began a huge exercise of starting online teaching-learning process, organized probably the largest number of webinars in the country in varied fields.

When the pandemic induced lockdown led to suspension of physical classes in the campus, the University immediately switched to organizing online classes for its students, both In-House and in the affiliated colleges. The University maintained a close network with its affiliated colleges during this endeavour and the entire exercise was undertaken in a seamless manner. The internal assessments and assignments were also received and evaluated online. The University had embarked on a massive exercise to give exposure to the students to the wealth of online courses available on the digital platforms. This was adequately leveraged, during the lockdown period, by both students and teachers of the University ecosystem.

The University has been laying stress on the Mandatory Additional Requirements (MAR) to be completed by the students while earning their Undergraduate degrees in order to ensure their holistic development. Under this programme, running for the last three academic years, the students earn Activity Points for their involvement in extra-curricular activities, social development, undertaking online courses and engaging themselves in entrepreneurial activities. We are the first University in the State to make co-curricular activities mandatory in our programme through introduction of Mandatory Additional Requirements.

Side by side, the academic, physical and psychological well-being of the students is being monitored regularly through an active Mentorship Programme with every college having a Single Point of Contact (SPOC) for such activity. We believe that the most important task of an academic institution is to create an enabling academic environment for the students and mentor them with a personal touch so that students can enjoy their teaching learning process.

Teaching should never be a one-way process; rather students and teachers should be co-learners in a stimulating academic milieu. MAKAUT has introduced Continuous Evaluation of the students in its assessment with this idea. Besides, this is going to prepare students as conscious, complete citizens with a holistic view of the world. The process of mentoring the students has been introduced in all the affiliated colleges of the University as well as for In-House courses.

MAKAUT, WB is trying to reach out the youth from the very finishing point of their school level to guide them about their future career prospects through its School Connect Programme. The aim is to bridge the information gap that comes in the way of their choice of appropriate profession in future. The University has spread its wings and has gone on to introduce new and vibrant courses in-house and also under its affiliated colleges, which are being publicized among the students at the 11-12 level. The focus is to create awareness about these courses among the school students, before they step into the job market. A number of online exhibitions, debates, competitions are also organized during the academic year 2020-21 under the banner of School Connect Programme to engage the students in constructive activities and to nurture their talents, especially in this pandemic situation.

The College Connect Programme has been introduced with the same objective of engaging the students in fruitful activities and help them overcome drudgery and depression during the pandemic. At the same time Industry Connect Programme has been launched to organize online workshops and webinars, in collaboration with experts from industries and chambers of commerce.

The University set up a dedicated Webinar committee and organized a large number of webinars on areas of topical interest with distinguished experts, professionals, entrepreneurs

and in-house faculty members as panellists during the lockdown period. These webinars covered technical and managerial topics, cutting edge research areas, interactions with students and their guardians, healthcare issues etc. The University plans to publish a compendium of these webinars in the digital mode to augment its digital teaching learning repository.

In this academic year MAKAUT organized an online Lecture Series "Sorrow-Depression-Joy", based on what the sages of ancient India and other eminent personalities have told about overcoming mental problems. The objective was to enhance the mental strength of the young generation, especially in this pandemic situation. The audience was mostly young students of MAKAUT, its affiliated colleges and other institutions.

MAKAUT also organized an online Talk Show Series "START UP WITHOUT FEAR" to interact with a rising entrepreneur, be it from West Bengal or any other state. These webinars gave a message to the young generation that the golden rule of successful start-ups is to find value in unexpected places where nobody else is looking.

MAKAUT, WB is also involved in projects under Corporate Social Responsibility (CSR). The University contacted many leading organizations like Coal India, WB Power Development Corporation, Airports Authority of India to take up projects for social development as well as environmental issues with funds from these organizations. Proper presentation and high level discussions were held and most of the projects for social causes are under consideration. But these are delayed due to the pandemic situation. Garden Reach Ship Builders and Engineers (GRSE), Kolkata, had sanctioned Rs.5 lakhs for preparation of impact study of the CSR projects taken up by GRSE independently. The study has been successfully completed and report has been submitted to the organization.

The University has remained steadfast in its commitment to serve the rural populace and other stakeholders during the lockdown. It manufactured sanitizers and masks and distributed these items to the needy and different stakeholders of the organization. During the lockdown, the University also came to the help of the local population, notably the poor, by giving cooked food. It also helped with relief efforts when the Yaas hurricane wreaked havoc on the state. In June 2021, MAKAUT, W.B. reached out to the YAAS-affected community of 600 families in Hingalganj. They brought uncooked food to the YAAS-affected population, including rice, lentils, mustard oil, biscuit packets, packaged drinking water, masks, sanitizers, sanitary napkins, vegetables, and more.

From May 20th to June 23rd, 2021, MAKAUT conducted a community kitchen for the COVID19 impacted communities, just as it did last year. During this time, we distributed 16,800 meal

packets (cooked food) to COVID19-affected individuals. The local administration of Haringhata, SDO Kalyani, had provided necessary administrative support to ensure the success of the MAKAUT Community Kitchen in West Bengal.

MAKAUT has taken the initiative to increase the number of plants in order to compensate for the loss caused by Yaas. The mass plantation of 2021 took place in June. Within the campus, around 4050 saplings were planted. Wood apple, jasmine, Jack fruit, mango, Alstonia, litchi, neem, were planted throughout the campus. MAKAUT, W.B. also worked with WWF, Nature Kolkata, to receive 3000 saplings, which were then planted throughout the campus. The plantation push was a huge success, and it helped to make the campus much greener.

A vaccination drive for MAKAUT employees was held at the Main Campus Haringhata on April 27th and 28th, 2021. A total of 412 personnel were vaccinated on the Campus. SDO Kalyani and JNM Hospital collaborated on the vaccination drive. At the Main Campus Haringhata, a vaccination drive was also held for the students.

The university has established a Social Entrepreneurship Cell and asked entrepreneurs and industrialists to submit Expressions of Interest to develop their businesses on the Haringhata campus. Ekta, the University's Technology Business Incubation Center, is now fully operational as well. One of the main goals of the Social Entrepreneurship Cell is to encourage local entrepreneurs and start-up businesses that can benefit students, professionals, and other members of the community. To strengthen its drive in the sphere of social entrepreneurship, the University is working to secure more such projects, which will be supported by the government or other authorities.

To summarise, we are actively working to become the enabler of an academic ecosystem in which modern teaching and learning pedagogy is practised, cutting-edge technology are encouraged, and various digital tools are utilised. We sincerely aspire to contribute to the overall growth and development of West Bengal, therefore demonstrating our status as the state's foremost technological university. We seek the cooperation and active engagement of all stakeholders in order to achieve our lofty goal. West Bengal has a long history of being a hotbed of academic and intellectual prowess. In today's market-driven economy, however, it is critical to make this education application-oriented so that it can lead to wealth creation and benefit not only the obvious and immediate stakeholders, but society as a whole. MAKAUT, as the state's largest Technological University, is devoted to completing this job in both letter and spirit. It is a long-held ambition of ours to actively contribute to the growth and development of West Bengal as a whole, thereby justifying our position as the state's top technological university.

On behalf of MAKAUT, I exhort all of you to join us in this journey towards a glorious future.

From the desk of the Registrar

A Technology University whose horizon extends from organizing undergraduate and postgraduate courses of study in not only Engineering, Technology and Management but has also widened the scope to include other Applied and Social Sciences. With 198 affiliated colleges in different spheres of Engineering, Technology, Management and Pharmacy there are 75 AICTE , 62 Non-AICTE and 19 B.Voc courses in undergraduate and postgraduate level. In-house we have 21 courses running at undergraduate as well as in 33 in

Dr Partha Pratim Lahiri

postgraduate level. In addition, some PG diploma and certificate courses are also running.

It is needless to say the mammoth expansion in the purview of course of study was undertaken only after the university began its journey from its new campus at Haringhata, Nadia sprawling across 40 across of land after its formal inauguration on 13th February, 2018 by Honorable Chief Minister. Having joined the position of Registrar my task initially was consolidation of the whole project and synchronization of the different departments in the newly developed campus. Now that the full-fledged Boys and Girls hostel have started functioning with the Biotech Building and the Academic Building fully operational, things have taken a wider perspective. The construction work is now complete, and all the administrative departments have been shifted in the newly built Administrative Building.

It may be stated that the horizon of the university extends throughout the state of West Bengal and though the Controller of Examinations Department had initially shifted to Haringhata but considering the scope of its work on a much broader platform, presently it is functioning from the existing city office at salt lake where the university was functioning over the years since the assumption of the office of the first Vice Chancellor on January 15, 2001 as a sequel to the promulgation of THE WEST BENGAL UNIVERSITY OF TECHNOLOGY ACT, 2001, under West Bengal Act XV of 2000 passed by the West Bengal Legislature. The University started its academic programme, from July 16, 2001 following a Notification from the Department of Higher Education; Government of West Bengal dated June 15, 2001 through the affiliation of Engineering and Management Institutions / Colleges. The University is included in Section 2F and also in Section 12B of UGC and recipient of UGC Grant.

University has overcome many challenges in last year, but some are still ahead. Proper utilization of fund, combating the shortage of faculties and staff and proper infrastructural development need to be looked after carefully for catering to the academic needs. I am sure in the days to come it will successfully implement the goals improve further its NAAC score and NIRF ranking. With everybody's sincere effort and cooperation, expected to move ahead with more glory and pride in the days to come.

About Maulana Abul Kalam Azad University of Technology, W.B.

An Introduction

The Government of West Bengal set up an expert committee on December 31, 1998, under the Chairmanship of Prof. A. P. Mitra, Eminent Scientist to explore the necessity and scope for establishment of an Engineering/Technology University in the state of West Bengal.

The University came into operation formally with the assumption of the office of the first Vice Chancellor on January 15, 2001 as a sequel to the promulgation of THE WEST BENGAL UNIVERSITY OF TECHNOLOGY ACT, 2000, under the West Bengal Act XV of 2000 passed by the West Bengal Legislature. The University started its academic programme, from July 16, 2001 following a Notification from the Department of Higher Education, Government of West Bengal dated June 15, 2001 through the affiliation of Engineering and Management Institutions / Colleges and has entered the Seventeenth year of its functioning. The University is included in Section 2F and also in Section 12 B of UGC and a recipient of UGC Grant.

The University is an equal opportunity, affirmative action institution and do not distinguish on the basis of gender, caste, creed and religion and it wants to grow nurturing innovative/ novel ideas that would touch all segments of the society especially the marginalized ones. The technology is nurtured from a broad social perspective and are organizing postgraduate courses in basic and applied sciences with interfaces to social sciences. The University has introduced new courses in emerging areas to develop, enhance and strengthen our position in research and higher education. It strives for optimum utilization of resources and believe in unleashing individual initiative for entrepreneurial development without compromising the collective need.

The University is steadfast in its twin objectives:

a) to serve as a Centre of Excellence in teaching and research in technology and management area

b) to provide framework of industrialization based on knowledge economy.

For emerging as a Centre of Excellence, the University has created seven Schools of Studies viz. School of Computational Sciences, School of Engineering Sciences, School of Biotechnology & Biological Sciences, School of Management and Sciences, School of Natural & Applied Sciences, School of Energy & Environmental Sciences and School of Food, Pharmaceutical and Medical Science & Technology comprising presently seventeen departments. viz. Department *of Computer Science & Engineering, Information Technology, Biotechnology, Bioinformatics, Material Science & Technology, Applied Science, Forensic Science, Pharmaceutical Science & Technology, Food Science & Technology, Renewable Energy, Environmental Science,*

Microelectronics & VLSI, Industrial Engineering and Management, Media Science, Management, Travel and Tourism Management & Hospital Management,. Apart from that University is equipped with some significant Centre of various Schools viz. *Geo informatics and Spatial Sciences, Agro Bio- technology, Bio Resource Management & Bio Economy, Waste Utilization, Robotics & 3D Printing, Biomedical Engineering.*

The M.Tech. course in Biotechnology is supported financially by Department of Biotechnology, Government of India. In addition to the UG/PG/certificate Ph.D. programs in emerging areas are also done by the various Schools of MAKAUT.

MAKAUT: The Freedom of Choice for Students
Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal is aware of the technological revolution, resulting in requirement of new skill sets in the job market. Accordingly, the University has restructured its educational programmes and put more stress on courses based on Artificial Intelligence, Cyber Security, Data Analytics, Robotics, Digital Marketing, Forensic Science etc. In addition to B.Tech courses in CSE and IT, MAKAUT has introduced UG and PG courses in these newly developed fields. These are introduced after analysing the market demand. As the nodal university of the state in technical and professional education, MAKAUT is anxious to take care of the new requirement the University realised much before the crisis triggered by corona pandemic that much stress is to be given to digital education. That actually gave it the lead in fast implementing the new digital pedagogy during the pandemic. COVID has accelerated its endeavour towards digital education in the last one and a half years. MAKAUT wants to stand beside its students and have adopted digital technology for assessment and evaluation too.

MAKAUT provides affiliation to 200 colleges offering traditional, as well as modern courses in Engineering & Technology, Pharmacy, Architecture, Management and Applied Sciences. It has introduced a plethora of modern courses to improve the employability of our students and encourage their entrepreneurship ability. At the same time MAKAUT is asking them to opt for Massive Open Online Courses (MOOCs) to encourage self-learning, continuous learning, and lifelong learning. The aim is to see them established in life.

MAKAUT should be the right choice of the students, in terms of experienced faculties, affordable fees, modern courses, adequate infrastructure for online mode of teaching, state of the art laboratories, library facility (along with digital library), separate hostels for boys and girls and the lush green campus at Haringhata. In a nutshell, MAKAUT gives the option before the young generation to walk along a career path of their choice and prosper in life.

When the natural flow of life was suddenly disrupted by Corona Virus many students have returned from foreign countries and have been forced to discontinue their studies. MAKAUT opened its doors to admit them in matching courses either in-house or in affiliated colleges. Students and their guardians are also afraid to send their children to foreign countries or in other Indian States for higher studies due to this pandemic. MAKAUT with its variety of modern courses can be the right choice for them.

In today's digitalized world, tradition is fast giving way to a new lifestyle, because of which the structure of entire teaching-learning process is undergoing a sea change. Many stereotyped courses are not always able to guarantee employment to the newcomers in the job market. At the same time prospects of new jobs and entrepreneurship are opening up every day in new and innovative fields. MAKAUT is always upgrading itself for acquiring new skills. Actually skill has two aspects -meritorious and top up. MAKAUT is ready to guide the students to build the foundation of all round skill development, so that they can prosper in life.

VISION of the University

To achieve the status of a globally ranked premier University in the field of Science, Technology, Pharmacy, Architecture, Management, and interdisciplinary areas for the creation of high-calibre professionals with environmental consciousness, social, moral and ethical values along with the competency to face the new challenges of rapid technological advancements.

MISSION of the University

- To create and disseminate knowledge both nationally & internationally towards the transformations of the civilization into a knowledge-based society

- To institutionalize the extension and field outreach activities with a view to transform the university system into an active instrument for social change

- To develop liaison and collaboration with the globally recognised academic institutions in order to inject new and fresh thinking in teaching, learning and research

To generate intellectually capable and imaginatively gifted professionals and successful entrepreneurs having environmental consciousness and ethics who can work as individual or in group in multi-cultural global environments for continuing significantly towards the betterment of quality of human life

University Campuses

The University established in 2001 through an Act passed in the West Bengal Legislative Assembly began operating from the West Bengal State Archives Building located at 43 Shakespeare Sarani, Kolkata 700017 and from there it was shifted to the building (erstwhile Bidhannagar College) from where it has been functioning over the years. It is only in the year 2018 after formal inauguration on 13th February by Hon'ble Chief Minister Govt. of West Bengal it began operation from its main campus at Haringhata in the District of Nadia. The main campus is housed sprawling across 40 acres of land having Academic and Administrative Blocks along with residential area covering the staff quarters, Guest House and hostels for boys and girls. The Biotechnology Building was simultaneously inaugurated on 13th February 2018 by Minister In-Charge of Higher Education Government of West Bengal in the Haringhata Campus where initially all the Academic and Administrative activities initially started. Later the Academic Block (both Left and Right) building started functioning and the departments of CSE, IT and Microelectronics & VLSI along with the Management Department started functioning from this Academic Building. After this the Library building became functional and the library was shifted. It is here only the state-of-the-art AR/VR Lab, the Language Lab is housed. It was in November 2020 the Administrative Block became functional and all the administrative departments viz Vice-Chancellor's office, Registrar's Department and the Finance Department started functioning from here. It is needless to say, to name a few of the developments, within the campus also developed the Food Science & Technology Lab, the Mechanical Workshop.

The Library building in the new campus is also complete and functional and the University is having an excellent Library besides adequate number of laboratories, workshops and classroom space including smart classrooms and ICT-enabled teaching learning environment has been developed in the campus for state of the art teaching learning practice.

The Haringhata campus of the University has developed an adequate IT infrastructure with more than 400 high-end PCs installed in different laboratories with a few numbers of dedicated computing facilities and individual PCs and laptops for all faculty members and officers as well as PCs for all the staff of the University. The University has a commendable computer to student ratio as per AICTE norms with excellent 1 Gbps network connectivity The Biotech building and girls' hostel are equipped with power backup systems.

The library boasts of more than 34000 books including both print books and E-books. There are more than 2000 e-journals and more than 100000 e-books and e-journals available from consortia (e-sodh-sindhu)

The campus is having several facilities like Staff Quarters, Gymnasium at hostels, Medical Centre, Sick Room, Playground, Guest House etc. The guest house having ample accommodation that includes 37 furnished rooms with internet and other amenities of international standards. The campus is equipped with its own electrical sub-station and power back-up. The campus is

connected with Wi-Fi facility. There are elevators, ramps and wheelchairs provided for differently abled persons. The University has beautiful well-maintained gardens. The University is also planning to have auditorium and Bank in its campus in near future. The campus is well planned and has developed rainwater harvesting and sewerage treatment plant. University Authority is also taking all measures to make it a green campus.

It is needless to say that the erstwhile city campus of the University with an area of 45,000 sq. ft at BF Block, Salt Lake is also now buzzing with activity as university having its jurisdiction over the whole of west Bengal with 197 affiliated colleges is equally bounded to serve the interest of the community at large for which presently two of the main administrative departments that of Controller of Examinations and Inspector of Colleges catering to examinations and affiliation respectively are carrying out its activity from there. Besides due to the massive expansion in the academic activities of the university that has taken place from the academic year 2019-2020, the newly introduced certificate courses and the partnership programmes are being conducted from there. Imported lecture classes, seminars, symposiums, workshops are also held on a regular basis. The Digital Inspection Lab situated in this campus is unique in a sense equipped with state-of-the-art infrastructure for conducting digital inspection of the colleges affiliated with this university numbering 192.

Academic Activities of the University : Various Schools, Departments and Centres at a glance

Schools	Departments and Centres
The School of Computational Sciences	Department of Computer Science and Engineering
	Department of Information Technology
	Centre for Geo-informatics and Spatial Sciences
	Centre of Mobile Computing
The School of Engineering Sciences	Department of Microelectronics & VLSI
	Department of Industrial Engineering & Management
	Department of Media Science
	Centre of Robotics and 3D Printing
	Centre of Biomedical Engineering
The School of Management Sciences	Department of Management
	Department of Travel and Tourism
	Department of Hospital Management
The School of Energy & Environmental Sciences	Department of Renewable Energy
	Department of Environmental Science
	Centre of Waste Utilisation
The School of Biological Sciences	Department of Bio - Technology
	Department of Bio - Informatics

The School of Food, Pharmaceutical and Medical Sciences & Technology	Department of Pharmaceutical Sc. & Technology
	Department of Food Science & Technology
The School of Natural & Applied Sciences	Department of Material Science and Technology
	Department of Applied Science
	Department of Forensic Science
Centre of Linguistics – An educational service providing department	

The School of Computational Science

Prof. Debashis De

Director

Introduction about the School:

The University has always been at the helm of educating, nurturing, and positively shaping the young minds of students who join every year. Maulana Abul Kalam Azad University of Technology, West Bengal (MAKAUT) is a University dedicated to the proper growth and development of every student for a better career prospect. The University is all set to bring out the potential within each student and provide proper guidance so that their potentials can be utilized to make them future engineers capable of meeting any challenge that will be faced by them after leaving the University. **The School of Computational Science** provides full support to improve their communication skills, critical thinking abilities, moral values, and sense of responsibility. All efforts are made to improve the creativity and problem-solving abilities of the students so that they can contribute their best to the society and the country.

We offer a variety of programs designed to either start your career or move your career forward while enabling you to confidently explore new industries for career possibilities and consider opportunities that you may not be aware of were available to you. Our curriculum is relevant, timely, and continuously adapt to address new social and economic challenges in a global context.

Thrust Areas of research:

Thrust areas of research includes: -

i.	Cloud Computing	xvi.	Smart Farming
ii.	Mobile Computing	xvii.	Natural Language Processing
iii.	Block-chain	xviii.	ICT Based Teaching- Learning and Assessment
iv.	Computational Nanotechnology		
v.	Internet of Things,	xix.	Voice Processing
vi.	Network Security	xx.	Image Processing
vii.	Mobile Computing	xxi.	Embedded System Design
viii.	Remote Healthcare	xxii.	Computer architecture

ix.	Computational Biology	xxiii.	Re-configurable Architecture using FPGAs
x.	Bio Informatics		
xi.	Artificial Intelligence and Machine Learning.	xxiv.	Software Defined Radio
		xxv.	VLSI design
xii.	Big data analysis and application	xxvi.	Digital Signal Processing
xiii.	cryptography	xxvii.	Gesture Recognition
xiv.	Data mining	xxviii.	Internet of Vehicles
xv.	Testing and Synthesis of Reversible Circuits.	xxix.	Cognitive Radio and
		xxx.	Vehicular Adhoc network.

Department of Computer Science and Engineering
Head of the Department: Dr. Suparna Biswas

Courses offered : All courses offered by the department of CSE are **All India Council for Technical Education (AICTE)** approved. The courses are given below:

- B.Tech. in Computer Science and Engineering (Estd. in the year of 2006)

- MTech in in Computer Science and Engineering (Estd. in the year of 2003)

- M.Tech in Software Engineering (Estd. in the year of 2003)

Name of the Centres:
- ❖ Centre for Geo-Informatics and Spatial Sciences
- ❖ Centre of Mobile Cloud Computing

Introduction of the Department: Computer Science and Engineering**(CSE)** has a team of highly qualified, experienced, and dedicated faculty members who devote their time not only to teaching but also for the overall development of the students. Further, faculty from other renowned institutions are invited to deliver guest lectures to help augment their studies beyond the syllabus. We are confident that the students passing out from this university will be technically sound, confident, and have good leadership skills.

Courses Offered:

Sl no	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1.	B.Tech. in Computer Science and Engineering	AICTE	4yr	60	Merit Rank -candidates having Engineering 'General Merit Rank' (GMR) in WBJEE -2020. Age - Candidate must be 17	

Sl. No						
					years of age or above as on 31.12.2020. Educational Qualification - Must have passed the Qualifying Examination i.e. the '10+2' examination with Physics and Mathematics along with any one of Chemistry / Biotechnology / Biology / Computer Science / Computer Application Technical Vocational Subject as compulsory subjects with individual pass marks (in both theory and practical wherever applicable) in all the three subjects as stated above in regular class mode. Must have obtained at least 45% marks in the above three subjects taken together. Must have passed English in the '10+2' examination with at least 30% marks.	
2.	MTech in in Computer Science and Engineering	AICTE	2yr	30	Valid GATE (Graduate Aptitude Test) score card. Valid PGET (Post Graduate Entrance Test conducted by MAKAUT,WB) score card. B.Tech. marks	
	M.Tech in Software Engineering	AICTE	2yr	30	Valid GATE (Graduate Aptitude Test) score card. Valid PGET (Post Graduate Entrance Test conducted by MAKAUT,WB) score card. B.Tech. marks	

List of Faculty:

Sl. No.	Name	Department	Designation	Regular/Contractual/Adjunct/ Guest)
1	Prof. Debashis De	Department of	Professor	Regular

		Computer Science & Engineering		
2	Prof. Sriyankar Acharyya	Department of Computer Science & Engineering	Professor	Regular
3	Dr. Santanu Phadikar	Department of Computer Science & Engineering	Associate Professor	Regular
4	Dr. Suparna Biswas (Saha)	Department of Computer Science & Engineering	Associate Professor	Regular
5	Dr. Koushik Majumder	Department of Computer Science & Engineering	Associate Professor	Regular
6	Dr. Pradyut Sarkar	Department of Computer Science & Engineering	Associate Professor	Regular
7	Dr. Amiya Karmakar	Department of Computer Science & Engineering	Assistant Professor	Regular
8	Dr. Saikat Basu	Department of Computer Science & Engineering	Assistant Professor	Regular
9	Dr. Sriparna Saha	Department of Computer Science & Engineering	Assistant Professor	Regular
10	Dr. Sujoy Mistry	Department of Computer Science & Engineering	Assistant Professor	Regular
11	Mihir Sing	Department of Computer Science & Engineering	Assistant Professor	Regular
12	Rupali Patua	Department of Computer Science & Engineering	Assistant Professor	Regular
13	Santanu Chatterjee	Department of Computer Science & Engineering	Assistant Professor	Regular
14	Subhanjan Sarkar	Department of Computer Science & Engineering	Assistant Professor	Regular

Number of Students placed in 2020-21: 29

Linkage with Institution/Industries:

    List of Industries

1. Infosys Limited
2. Cognizant Technology Solutions
3. Tata Consultancy Services
4. Wipro limited.
5. Subex Limited
6. Iconma
7. EPAM Systems, Inc.
8. Mindtree Limited.
9. L & T Infotech Limited.
10. Interview Street Technologies Private Limited
11. Google BPO.

Research Scholars awarded PhD during 2020-21:

1. Sahabul Alam
2. Ramesh Saha
3. Debarati Dey

Details of Support Staff:

1. Shubhashis Sengupta
2. Sumana Chakraborty
3. Swarup Pramanik
4. Bikash Saha

Faculty Profile

Prof. Debashis De
Professor

Prof. Debashis De earned his M.Tech from the University of Calcutta in 2002 and his Ph.D. (Engineering) from Jadavpur University in 2005. He is the Professor and Director in the Department of Computer Science and Engineering of the West Bengal University of Technology, India, and Adjunct research fellow at the University of Western Australia, Australia. He is a senior member of the IEEE. Life Member of CSI and a member of the International Union of Radio Science. He worked as an R&D engineer for Telektronics and programmer at Cognizant Technology Solutions. He was awarded the prestigious Boys cast Fellowship by the Department of Science and Technology, Government of India, to work at the Herriot-Watt University, Scotland, UK. He received the Endeavour Fellowship Award from 2008–2009 by DEST Australia to work at the University of Western Australia. He received the Young Scientist award both in 2005 at New Delhi and in 2011 at Istanbul, Turkey, from the International Union of Radio Science, Head Quarter, Belgium. His research interests include mobile cloud

computing, Green mobile networks. He has published in more than 280 peer-reviewed journal papers and 100 conference papers, ten research monographs, and ten textbooks. He is an Associate Editor of the journal IEEE ACCESS, Editor Hybrid computational intelligence.

Research Area: Mobile cloud Computing, crowd-sensing, block-chain, Computational Nanotechnology.

Prof. Sriyankar Acharyya
Professor

About Dr. Sriyankar Acharyya

Prof. Acharya obtained M. Tech. and Ph.D. in Computer Science & Engg. from Calcutta University. He worked in Bhabha Atomic Research Centre as Scientific Officer (C) from 1989 to 1995. Then, he was Reader in Physics at Vivekananda College, Kolkata. and Reader in Computer & System Science at Visva Bharati University. At present he is Associate Professor in Computer Scince & Engg., Maulana Abul Kalam Azad University of Technology, West Bengal. His current area of research interest is Constraint Satisfaction Problems (CSP), Meta-heuristic Search, Combinatorial Optimization, Scheduling, Search Techniques and Genomics.

Dr. Suparna Biswas

Associate Professor & HoD

Research Area: Wireless Networks, Security, Mobile Computing

About Dr. Suparna Biswas (Saha) : Dr. Suparna Biswas is working as an Associate Professor in the Department of Computer Science & Engineering in Maulana Abul Kalam Azad University of Technology, WB. She has received ME and Ph.D from Jadavpur University, West Bengal in 2004 and 2013 respectively. She has been an ERASMUS MUNDUS Post Doctoral research fellow in cLINK project in Northumbria University, Newcastle, UK during 2014-15. She is currently handling two funded research projects in the capacity of PI and Co-PI in the area of IoT based remote healthcare. She has co-authored a number of research papers published in journals, conferences and as book chapters of international repute. Her areas of research interests are Internet of Things, Network Security, Mobile Computing and Remote Healthcare. She has been associated in Edited Volumes with reputed international publishers such as Springer, worked in organizing International Conference as Lead Organizing Chair etc.

Journal:

[1]. S.Saif, R.Saha, S.Biswas, "On Development of MySignals based prototype for application in health vitals monitoring", *Wireless Personal Communication* (2021), **SCI, (Impact Factor-1.2),** https://doi.org/10.1007/s11277-020-08054-y, Published, 2021.

[2]. Bhattacharjee, Pratik, and **Suparna Biswas,** "Smart walking assistant (SWA) for elderly care using an intelligent realtime hybrid model." *Evolving Systems* (2021): 1-15, **SCI, Impact Factor: 2.16**, DOI: https://doi.org/10.1007/s12530-021-09382-5, published in April, 2021.

[3]. Saha, R., **Biswas, S.**, Sarma, S. *et al.*, "Design and Implementation of Routing Algorithm to Enhance Network Lifetime in WBAN", *Wireless Personal Communication* (2021), **SCI, (Impact Factor-1.2),** https://doi.org/10.1007/s11277-020-08054-y, published in Januray 2021.

[4]. Ghosh, A., Roy, S., Mondal, H., **Biswas S.,** Bose R., *et al.,* " Mathematical modeling for decision making of lockdown during COVID-19", *Applied Intelligence* (published in May 2021), **SCI, Impact Factor : 3.325**, https://doi.org/10.1007/s10489-021-02463-7.

[5]. Koushik Karmakar, Sohail Saif, **Suparna Biswas,** Sarmistha Neogy, "A WBAN based framework for health condition monitoring and faulty sensor node detection applying ANN", International Journal of Biomedical and Clinical Engineering, Volume 10, Issue 2, IGI Global, **Scopus, UGC CARE**, July-December 2021.

[6]. D. Thakur and **S. Biswas,** "Feature fusion using deep learning for smartphone based human activity recognition", International Journal of Information Technology, IJIT, Springer, **Scopus, UGC CARE**, published 12 June, 2021.

[7]. D. Thakur and **S. Biswas**, "Smartphone based human activity monitoring and recognition using ml and dl: a comprehensive survey," Journal of Ambient Intelligence and Humanized Computing, 11 (11) (2020) 5433–5444, https://doi.org/10.1007/s12652-020-01899-y, **SCI, (I.F-3.348), Published in March, 2020.**

[8]. S.Saif, R.Gupta, **S.Biswas**, "A complete secure cloud based WBAN framework for health data transmission by implementing authenticity, confidentiality and integrity", International Journal of Advanced Intelligence Paradigms (IJAIP), ISSN Online: 1755-0394 ISSN Print: 1755-0386 , Accepted on September 2018, (In press, to be published in 2021), **Scopus.**

[9] S.Saif, R.Saha, S.Biswas, "On Development of MySignals based prototype for application in health vitals monitoring", *Wireless Personal Communication* (2021), **SCI, (Impact Factor-1.2),** https://doi.org/10.1007/s11277-020-08054-y, published online on 18th August, 2021.

 Book Chapter:

1. D. Thakur and **S. Biswas**, "Machine   Learning in Sustainable Healthcare", " Advanced Computational Techniques for Sustainable Computing", M. Rathi and A. Sinha, Taylor & Francis Group, LLC/CRC Press, USA, 2020.

2. A. Saha, C. Chowdhury, M. Jana, and **S. Biswas**, "IoT Sensor Data Analysis and Fusion Applying Machine Learning and Meta-Heuristic Approaches", Enabling AI Applications in Data Science, Studies in Computational Intelligence 911, https://doi.org/10.1007/978-3-030-52067-0_20, ISBN 978-3-030-52066-3, September, 2020.

3. R. Saha, S.Sen, J.Saha, A. Nandy, **S. Biswas**, C. Chowdhury , "Ontology based intelligent decision support systems: a systematic approach ", Book chapter in Book "Web Semantics – Cutting Edge and Future Directions in Health Care", Elsevier, Web Semantics (WS 2020), April 2021, ISBN: 978-0-12-822468-7, https://doi.org/10.1016/B978-0-12-822468-7.00005-5

4. S. Sen, Sathi Roy, **S. Biswas,** C. Chowdhury, "Security and Privacy Aware Computing in Cloud with User Mobility: An Extensive Review", Modern Principles, Practices, and Algorithms for Cloud Security, IGI Global, DOI: 10.4018/978-1-7998-1082-7.ch001, 2020, ISBN: 978-1-7998-8954-0

5. S.Saif, D.Datta, A.Saha, **S.Biswas**, C.Chowdhury, "Review on data science and AI applications in IoT based smart healthcare: A case study based approach" in Enabling AI applications in Data Science, vol.911, Springer, September, 2020, ISBN: 978-3-030-52067-0, https://doi.org/10.1007/978-3-030-52067-0_19.

6. P.Bhattacharjee, **S. Biswas** "Smart fall detection system for elderly care" (2020) Chapter 6 in Book, " Recent Paradigms of Deep Learning and IoT in Healthcare", AAP-CRC (Taylor & FrancisGroup), ISBN:9781771889322 Scopus indexed.

7. R. Saha, S. Sen, S. Saif and **S.Biswas**, "Architecture for Smart Healthcare: Cloud vs Edge", *Springer, IoT based Smart Healthcare (ITSH), 2020, Book Series "Smart Computing and Intelligence", ISSN :* 2522-0888, **(Accepted, with publisher).**

8. S. Saif, P.Bhattacharjee, Ramesh Saha and **S.Biswas**, "IoT Based Secure Healthcare: Challenges, Requirements and Case Study", *Springer, IoT based Smart Healthcare (ITSH 2020, Book Series "Smart Computing and Intelligence", ISSN :* 2522-0888 (**Accepted, 2021, with publisher).**

9. D.Thakur, S.Biswas, A.Pal, "Human Activity Recognition Systems Based on Audio-Video Data using Machine Learning and Deep learning", *Springer, IoT based Smart Healthcare (ITSH 2020), Book Series "Smart Computing and Intelligence", ISSN :* 2522-0888, (**Accepted, 2021).**

10. S.Saif, M.Jana, **S.Biswas**, "Recent Trends in IoT based Smart Healthcare Applying ML and DL", Emerging Technologies in Data Mining and Information Security, Lecture Notes in Networks and Systems, vol 164, May 2021, Springer , ISBN: 978-981-15-9773-2, https://doi.org/10.1007/978-981-15-9774-9_72.

11. D. Thakur and **S. Biswas**, "A Novel Human Activity Recognition Strategy using Extreme Learning Machine Algorithm for Smart Health", Emerging Technologies in Data Mining and Information Security. Advances in Intelligent Systems and Computing, vol 1286, June 2021, Springer, 2020, ISBN: 978-981-15-9926-2, https://doi.org/10.1007/978-981-15-9927-9_21.

12. Biswas Suparna Biswas, Suparna, and Chandreyee Chowdhury., "Smartphone and Sensor based Health Monitoring Enabled with IoT and ML." In *22nd International Conference on Human-Computer Interaction with Mobile Devices and Services*, pp. 1-3, October, 2020, ACM ISBN 978-1-4503-8052-2/20/10. https://doi.org/10.1145/3406324.3410334

International Conferences:

[1]. K. Chanda, P. Bhattacharjee, S. Roy and **S. Biswas**, "Intelligent Data Prognosis of Recurrent of Depression in Medical Diagnosis", *2020 8th IEEE International Conference*

on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Noida, India, 2020, pp. 840-844, doi: 10.1109/ICRITO48877.2020.9197843.

[2]. D. Thakur and **S. Biswas**, "Optimization of hyperparameters in Convolutional Neural Network for Human Activity Recognition", Proc. of the ICMISC 2021, 28-29th March, 2021(accepted and presented, under publication).

[3]. D. Thakur and **S. Biswas**, "Smartphone based Human Activity Pattern Identification using Unsupervised Learning", ICDSA 2021, springer, (accepted on 15th March, 2021, presented and under publication).

[4]. T. Pal, S. Barari, R. Saha, S. Saif and S.Biswas, "Design and implementation of centrality approach based energy efficient routing in Wireless sensor network", International Conference on Advanced Computing and Applications 2021, ICACA 2021, Springer (Accepted, presented and under publication).

[5]. P.Bhattacharya, S.Biswas, "Design of an energy efficient probabilistic algorithm for a hybrid healthcare network", 3rd International conference on communication, devices & computing (ICCDC 2021) springer, Haldia Institute of Technology, India, (Accepted on July 13, 2021), conference held from 16-18th August, 2021, (Paper presented and under Publication).

[6]. K.Karmakar, S.Biswas, "A priority based routing protocol to improve quality of service (QoS) in Wireless Body Area Network for COVID and diabetic patients", 3rd International conference on communication, devices & computing (ICCDC 2021) springer, Haldia Institute of Technology, India, (Accepted in July 13, 2021), conference held from 16-18th August, 202, (Paper presented and under Publication).

Invited Talks

1. International ACM Conference Tutorial Lecture on "Smartphone and Sensor based Health Monitoring enabled with IoT and ML" Mobile HCI, 2020, October 5-8, ACM Conference, Oldenburg, Germany, 5th October, 2020.

2. Two Weeks Short Term Course (STC) on "**The Key Enabling Technologies for 5G Communications and Beyond**", 02.08.2021-13.08.2021, organized by Jaypee Institute of Information Technology, JIIT, Noida.

3. Webinar "IoT in Healthcare: Issues and Challenges", Institution of Engineers (India), Tripura, 30.06.2021.

4. . Webinar "IoT in Healthcare Application", B P PODDER Institute of Management & Technology, Kolkata, May 17-22, 2021.

5. Webinar "Internet of Things: Security and Applications" Computer Application Department, Pailan College of Management & Technology, 23rd May, 2020.

6. Faculty Development Program, "Internet of Things: Challenges and Application" , Department of Computational Science, Brainware University, 8th June, 2020.

7. Webinar on "Wireless Sensor Network: Recent Trends", Department of Computer Science & Engineering, Seacom Engineering, 19th June, 2020 .

8. Webinar "Internet of Things: Research Trends and User Authentication Issues", Sarojini Naidu College, 15th July, 2020.

9. Talk on "Departmental Achievements" in "HR Conclave", MAKAUT, WB., 31.07.2021.

10. Invited talk in AICTE-ISTE Induction/Refresher Programme in "Data Analysis using Deep Learning" from 14.12.2021 to 19.12.2021.

Dr. Sriparna Saha
Assistant Professor

Qualifications: B.Tech, M.E., PhD(JU)

Seminar/Webinar organized/participated in 2020-21:

Joint Coordinator of FDP on 'Intelligent Computing' from 11th September – 15th November, 2020
Joint Coordinator of FDP on 'Internet of Things Security' from 07th November – 11th November, 2020
Webinar on 'Journey of a Successful Entrepreneur" dated 21st May' 2021.
Webinar on 'The Online Inauguration Program of Digital Library' dated 21st May' 2021.
Webinar on 'The Science of Learning' dated 25th May, 2021.
Webinar on 'COVID19 Vaccination: Myths and Facts' dated 6th June, 2021.
Webinar on 'Key to Achieving Bliss Session-10' dated 30th June, 2021.

Workshop organized/participated in 2020-21:
Workshop on 'Fundamentals of Deep Learning for Multiple Data Types' on 07th July, 2020
Workshop on 'Big Data Analytics' from 13th September – 18th September, 2020
Workshop on "Simple Tools and Techniques for Preparation of Digital Content" on 24th April'2021

Invited Lectures in 2020-21:
Presentation at Dayananda Sagar College of Arts, Science & Commerce on 12th June, 2020

Research Papers Published:
In Journals

1. "Bi-directional Long Short-Term Memory Model to Analyze Psychological Effects on Gamers", Lidia Ghosh, **Sriparna Saha** and Amit Konar, *Applied Soft Computing*, Elsevier, ISSN 1568-4946, October 2020, Volume 95, 106573, page(s): 1-15, https://doi.org/10.1016/j.asoc.2020.106573, Impact Factor: 6.725.

2. "Decoding Emotional Changes of Android-Gamers Using A Fused Type-2 Fuzzy Deep Neural Network", Lidia Ghosh, **Sriparna Saha** and Amit Konar, *Computers in Human Behavior*, ISSN 0747-5632, Elsevier, March 2021, Volume 116, 106640, page(s): 1-14, https://doi.org/10.1016/j.chb.2020.106640, Impact Factor: 6.829.

In Conferences

1. "Analyzing Gaming Effects on Cognitive Load Using Artificial Intelligent Tools", Sima Das, Lidia Ghosh and **Sriparna Saha**, 6th International Conference on Electronics, Computing and Communication Technologies, IEEE, 2-4 July 2020, page(s): 1-6, DOI: 10.1109/CONECCT50063.2020.9198662 *(presented)*.

2. "Automatic Employability Test for Factory Workers using Collaborative Filtering", Ahona Ghosh and **Sriparna Saha**, IEEE Bombay Section Signature Conference, IEEE, Date of Conference: 4-6 Dec. 2020, page(s): 52-57, DOI: 10.1109/IBSSC51096.2020.9332221.

3. "Highly Accurate Real time human Counter with Minimum Computation Cost", Shatadal Ghosh, Anurag Kumar and **Sriparna Saha**, International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies, IEEE, 19-20 February 2021, page(s): 1-7, DOI: 10.1109/ICAECT49130.2021. 9392459 *(presented, Best Paper Award)*.

Books/Book Chapter Published:

1. "A Kinect-based motor rehabilitation system for stroke recovery", **Sriparna Saha** and Neha Das, *Handbook of Computational Intelligence in Biomedical Engineering and Healthcare*, Elsevier, Academic Press, ISBN: 9780128222607, 8th April 2021, page(s): 261-282.

2. "Fuzzy-Based Stratagem for Teleoperation of Robots in Incoherent Environments", **Sriparna Saha**, Rimita Lahiri and Amit Konar, *Advances in Antenna, Signal Processing, and Microelectronics Engineering*, Taylor & Francis Group, Apple Academic Press, ISBN: 9781771888837, July 2021, page(s): 149-184, DOI: https://doi.org/10.1201/9781003006190.

Research Projects:

Sl. No.	Title of the Major /Minor Project	Sponsoring Agency	Period	Grant/ Amount mobilized
1.	Towards cognitive rehabilitation: an interpretation based on sensory perception	UGC Basic Scientific Research (BSR) – Start-Up Grant No.F.30-449/2018(BSR) dated 27th March 2019	9th December 2020 – 8th December 2021	10 lakhs

Refresher/Orientation Courses:

Name of the Course	Place	Duration	Sponsoring Agency
Refresher Course on 'Engineering & Technology'	UGC Human Resource Development Centre	1st – 14th December, 2020	TEQIP-III, MAKAUT, W.B.

	(HRDC), Mizoram University		
Faculty Induction Programme (Guru Dakshta)	UGC Human Resource Development Centre (HRDC), Jadavpur University	22nd February – 27th March, 2021	TEQIP-III, MAKAUT, W.B.

PhD Guided: Ahona Ghosh (On-going from 1st February'2021)

Professional Activities:

'Introduction to Artificial Intelligence' from Simplilearn on 06th April, 2020
'AI For Everyone' from Coursera on 13th April, 2020
'Deep Learning' Specialization from Coursera from 21st April – 22nd June, 2020
'Programming for Everybody (Getting Started with Python)' from Coursera on 02nd July, 2020
'Python Data Structures' from Coursera on 08th July, 2020
'Introduction to Artificial Intelligence (AI)' from Coursera on 17th August, 2020
'Using Python to Access Web Data' from Coursera on 01st September, 2020
'Machine Learning for All' from Coursera on 02nd September, 2020
'Introduction to Programming with MATLAB' from Coursera on 01st September, 2020

Any other information:

Program Committee Member and Reviewer in International Conference on Data Science and Applications (ICDSA-2021) held during April 10-11, 2021

Dr. Saikat Basu
Assistant Professor

Qualifications : M.E. (JU), PhD(IIT Kharagpur)

Seminar/Webinar organized/participated in 2020-21:

- Program coordinator of Automation Robotics and Intelligence July 27th 2020, MAKAUT.

- Program coordinator of Security of things and their low cost authenticated interaction in the world of IOT August 3rd 2020, MAKAUT.

Workshop organized/participated in 2020-21:
- NPTEL online certification on 'Introduction to internet of things' Sep-Dec 2020
- NPTEL online certification on 'computer network and internet protocol' Jan-Apr, 2020
- Introduction to Artificial Intelligence, April-May, 2020
- Cloud Computing Basics (Cloud 101) March-Apr 17, 2020
- Coordinator of IOT security 7-11 Nov 2020

Invited Lectures in 2020-21:
- Delivered invited lecture on Bioinformatics, International conference on computing and communication system(I3CS 2020), NEHU.
- Paper presented**:** Discernment of human stress using generic computer aided tasking: a review, International conference on computing and communication system(I3CS 2020), NEHU.
- Paper presented**:** Statistical analysis of emotional response through physiological signal, International conference on computing and communication system (I3CS 2020), NEHU.
- Paper presented**:** Attendance automation using computer vision and biometrics based authentication-a review, ICCNCT 2020, RVS technical campus, Coimbatore.

Research Papers Published:
- **Basu, Saikat**, Nabakumar Jana, Vamshi Krishna, Manjunatha Mahadevappa, Jayanta Mukherjee, Rajlakshmi Guha, and Somesh Kumar. "Statistical Analysis of Emotional Response through Physiological Signals." In Proceedings of the International Conference on Computing and Communication Systems: I3CS 2020, NEHU, Shillong, India, vol. 170, p. 189. Springer Nature, 2021.
- Raj, Suraj, and **Saikat Basu**. "Attendance Automation Using Computer Vision and Biometrics-Based Authentication-A Review." Computer Networks and Inventive Communication Technologies (2021): 757-767.
- Patua, Rupali, Tripti Muchhal, and **Saikat Basu**. "Gait-Based Person Identification, Gender Classification, and Age Estimation: A Review." Progress in Advanced Computing and Intelligent Engineering (2021): 62-74.
- Debnath, Soumyabuddha, and **Saikat Basu**. "Discernment of Human Stress Using Generic Computer-Aided Tasking—A Review." In Proceedings of the International Conference on Computing and Communication Systems: I3CS 2020, NEHU, Shillong, India, vol. 170, p. 203. Springer Nature, 2021.

Books/Book Chapter Published:
- **Saikat Basu**, Sudipta Saha, Sourav Das, Rajlaksmi Guha, Jayanta Mukhopadhyay, Manjunatha Mahadevappa "Montaj": A Gaming System for Assessing Cognitive Skills in a Mobile Computing Platform (Recently accepted book chapter in Springer Nature).

Guided Projects Two M.Tech projects

Sl No.	Thesis title	Student name (M. Tech tesis submitted)	Year
1	Development Of Music Learning Application For Autistic Children	Pragati Ghosh	2020
2	Vegetation Health and Forest Canopy Density Monitoring in Sundarbans Using Remote Sensing and GIS	Smarajit Naskar	2020

Patents/IPR Generated: Copy rights of 'Montaj' Type of work: Software, Language of the work: JAVA and XML , Registration No.-SW-14044/2020

Professional Activities:
- Direct teaching activities (including Lectures, Tutorials, Practical, Project Supervision).

SL no	Courses	Level	Model of teaching
1	OPERATING SYSTEM DESIGN (PGCS 103B) for CSE and SE	M.Tech 1st Semester	L+T
2	PGCS 192B (OPERATING SYSTEM DESIGN)	M.Tech 3rd Semester	L+T
3	ES-CS301(Digital Electronics)	B.Tech 3rd Semester	L+T
4	ES-CS 391 (Digital Electronics)	B.Tech 3rd Semester	P
5	ESC 501 (Software Engineering)	B.Tech 5th Semester	L+T
6	ESC 591 [LAB 2]	B.Tech 5th Semester	P
7	PGCS204e (NETWORK SECURITY)	M.Tech 2nd Semester	L+T
8	PGSE 202 (SOFTWARE QUALITY MANAGEMENT)	M.Tech 2nd Semester	L+T
9	IT602 (Computer Networking)	B.Tech (IT) 6th Semester	L+T
10	IT 692 (Computer Networking Lab)	B.Tech (IT) 6th Semester	P
11	CS801D (Cryptography & Network Security)	B.Tech (CSE) 8th Semester	L+T

- Career counseling/Mentorship of UG and PG students
- University nominee in the Governing body of Bengal Institute of Technology
- Placement in-charge WBUT
- Member NBA committee

Any other information:
- Participate in cultural programs of MAKAUT

Dr. Pradyut Sarkar
Associate Professor(CSE)

Qualifications : B. Tech & M.Tech (CU), PhD(JU)

Seminar/Webinar organized/participated in 2020-21:
1. Organized a webinar on "Computational Biology and Biomedical Engineering" on 27 September, 2020
2. Participated in various webinar

Workshop organized/participated in 2020-21:
Organized   FACULTY DEVELOPMENT PROGRAMME ON " INTELLIGENT COMPUTING " on *11 September, 2020 to 15 September*

Invited Lectures in 2020-21:
Lecture in Induction program on "VLSI testing and its scope for the Computer Science and Engg student in Industry and research work.

Research Papers Published: 2

1. "Evaluation of State-Wise Epidemiological Outbreak of COVID-19 Cases In India by Data Analysis Approach to Forecast the Coronavirus Disease Pandemic" Sumana Sikdar, Pradyut Sarkar, Sibnath Kayal International Journal of Computer Engineering In Research Trends (IJCERT) , ISSN:2349-7084 ,Vol.8, Issue 03,pp.50-56, March - 2021:10.22362/ijcert/2021/ v8/i3/v8i301

2. "Futuristic Cloud Market- Game Theoretic Equilibrium" Avijit Bose,Pradyut Sarkar, Premananda Jana International Conference on Industrial Instrumentation & Control (ici2c-2021) 20th to 22nd August, 2021

KOUSHIK MAJUMDER
Associate Professor

Qualifications : B. Tech & M.Tech (CU), PhD(JU)

Seminar/Webinar organized/participated in 2020-21:

1. Participated in the Webinar on "**Automation, Robotics and Intelligence**" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology , West Bengal on 27th July, 2020

2. **Program Coordinator and Panellist** of the Webinar on "**Security of Things and their Low Cost Authenticated Interaction in the World of IoT**" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal in association with Indian Institute of Technology, Kharagpur on 03/08/2020. Keynote Speaker : Prof. Debdeep Mukhopadhyay, Department of Computer Science & Engineering, Indian Institute of Technology, Kharagpur

3. Participated in the Webinar on "**Cryptography, Network Security and Cybersecurity**" organized jointly by Maulana Abul Kalam Azad University of Technology, West Bengal and Islamic University of Science & Technology, J&K, India on 6th August, 2020, 2020

4. **Organizing Committee Member** of Online 5 **day Faculty Development Program** on "**Intelligent Computing**" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal in association with Islamic University of Science & Technology, J&K, India during 11th to 15th September, 2020.

5. Participated in the 5 day Faculty Development Program on "**Digital Forensic & Ethical Hacking**" organized by the Department of Forensic Science, Maulana Abul Kalam Azad University of Technology, West Bengal in association with Islamic University of Science & Technology, J&K, India funded by TEQIP-III during 16th to 20th September, 2020.

6. **Program Coordinator and Organizer** of ISEA Project Phase II One week Online **Faculty Development Program** on "**Application of Artificial Intelligence & Machine Learning in Security**" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal , sponsored by the Department of Electronics and Information Technology, Govt. of India during 12th to 16th October, 2020.

7. Organizing Committee Member of Online **Faculty Development Program** on "**Internet of Things Security**" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal in association with Islamic University of Science & Technology, J&K, India during 7th to 11th November, 2020.

8. Participated in the 5 day Online Workshop on "**Challenges in Cyber Security and Cyber Crime**" organized by the Department of Information Technology, Maulana Abul Kalam Azad University of Technology, West Bengal and Centre for Development of Advanced Computing (CDAC),Kolkata during 22nd to 26th November, 2020.

9. Participated in the Webinar on "**Awareness Webinar on Outcome Based Education and Accreditation for the Engineering Colleges in West Bengal**" organized by National Board of Accreditation in association with Maulana Abul Kalam Azad University of Technology, West Bengal , on 15th December, 2020.

10. **Session Chair of ICEEE2021** (2021 International Conference on Electrical and Electronics Engineering) , January 2-3, 2021, jointly organized by School of Engineering, The University of Malaya, Kualalampur, Malaysia and Centre of Excellence – Power Engineering and Clean Energy Integration, Galgotias University, India

11. Participated in "**Higher Education Conclave on NBA & ABET**" (online) organized by Mastersoft ERP Solutions Pvt. Ltd. On 9th January, 2021

12. **Technical Session Chair** at the 2021 International Conference on Advanced Computing and Intelligent Technologies (ICACIT 2021), jointly organized by School of Computing Science and Engineering (SCSE) Galgotias University, India, School of Electrical, Communication & Electronics Engineering (SEECE) Galgotias University, India and Department of Information Engineering and Mathematics Università Di Siena, Italy held on March 20-21, 2021. Specific session details: Date: 21.03.2021, 9:00 AM to 11.30AM, SD1, meet.google.com/ock-cdxd-yee

13. **Technical Session Chair** of the 6th technical session on Networking Systems organised on 27th march as part of the 2nd International Conference on Advanced Computing and Applications (ICACA 2021), held during March, 27th – 28th, 2021 organized by The Computer Society of India (CSI), Kolkata Chapter.

14. **Organizing Committee Member** of AICTE sponsored Online 6 Days Short Term Training Programme (STTP) on "New Avenues of Emotion Recognition" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal during 23rd to 28th August, 2021.

Workshop organized/participated in 2020-21:
1. **Coordinator and Organizer** of One week ISEA Project Phase II Faculty Development Program on "Cyber Forensics" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal, sponsored by the Ministry of Electronics and Information Technology (MeitY), Govt. of India during 10 to 14th February, 2020 at Maulana Abul Kalam Azad University of Technology, West Bengal Haringhata campus.

2. Attended the ISEA Project Phase II Appraisal Workshop form 27.02.2020 to 01.03.2020 at IIT, Guwahati and acted as the **Session Judge** for the session on Doctoral Dissertation Presentation on 01/03/2020.

3. **Organizing Committee Member** of Online 5 **day Faculty Development Program** on "**Intelligent Computing**" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal in association with Islamic University of Science & Technology, J&K, India during 11th to 15th September, 2020.

4. Participated in the 5 day Faculty Development Program on "**Digital Forensic & Ethical Hacking**" organized by the Department of Forensic Science, Maulana Abul Kalam Azad University of Technology, West Bengal in association with Islamic University of Science & Technology, J&K, India funded by TEQIP-III during 16th to 20th September, 2020.

5. **Program Coordinator and Organizer** of ISEA Project Phase II One week Online **Faculty Development Program** on "**Application of Artificial Intelligence & Machine Learning in Security**" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal , sponsored by the Department of Electronics and Information Technology, Govt. of India during 12th to 16th October, 2020.

6. Organizing Committee Member of Online **Faculty Development Program** on "**Internet of Things Security**" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal in association with Islamic University of Science & Technology, J&K, India during 7th to 11th November, 2020.

7. Participated in the 5 day Online Workshop on "**Challenges in Cyber Security and Cyber Crime**" organized by the Department of Information Technology, Maulana Abul Kalam Azad University of Technology, West Bengal and Centre for Development of Advanced Computing (CDAC),Kolkata during 22nd to 26th November, 2020.

8. **Organizing Committee Member** of AICTE sponsored Online 6 Days Short Term Training Programme (STTP) on "New Avenues of Emotion Recognition" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of
Technology, West Bengal during 23rd to 28th August, 2021.

Invited Lectures in 2020-21:
1. As a **Speaker** delivered lecture on the topic of "**Penetration Testing**" in the One week ISEA Project Phase II Faculty Development Program on "Cyber Forensics" organized by the Department of Computer Science & Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal , sponsored by the Ministry of Electronics and Information Technology (MeitY), Govt. of India during 10 to 14th February, 2020 at Maulana Abul Kalam Azad University of Technology, West Bengal Haringhata campus.

2. Delivered lecture as a **Resource Person/Expert** in the Workshop on **E-Learning** at West Bengal State University, Barasat on 25th August, 2020

3. Acted as a **Resource Person/Expert** of Computer Application and delivered lecture on Open Office in the PhD coursework of West Bengal State University, Barasat during 22nd to 24th September, 2020

4. **Presented paper** titled "A Systematic Review of Log-based Cloud Forensics" in the 2nd International Conference on Inventive Computation and Information Technologies (ICICIT-2020) organized by RVS Technical Campus, Coimbatore, India on 24-25 September, 2020 (Paper presented on 24/09/2020 and to be published in Springer)

5. **Session Chair of ICEEE2021** (2021 International Conference on Electrical and Electronics Engineering) , January 2-3, 2021, jointly organized by School of Engineering, The University of Malaya, Kualalampur, Malaysia and Centre of Excellence – Power Engineering and Clean Energy Integration, Galgotias University, India

6. **Technical Session Chair** at the 2021 International Conference on Advanced Computingand Intelligent Technologies (ICACIT 2021), jointly organized by School of Computing Science and Engineering (SCSE) Galgotias University, India, School of Electrical, Communication & Electronics Engineering (SEECE) Galgotias University, India and Department of Information Engineering and Mathematics Università Di Siena, Italy held on March 20-21, 2021. Specific session details: Date: 21.03.2021, 9:00 AM to 11.30AM, SD1, meet.google.com/ock-cdxd-yee

7. **Technical Session Chair** of the 6th technical session on Networking Systems organised on 27th march as part of the 2nd International Conference on Advanced Computing and Applications (ICACA 2021), held during March, 27th – 28th, 2021 organized by The Computer Society of India (CSI), Kolkata Chapter.

Research Papers Published:

1. "QoS aware distributed dynamic channel allocation for V2V communication in TVWS spectrum", Sadip Midya, Asmita Roy, Koushik Majumder, Santanu Phadikar. Computer Networks, Else Vier, Volume 171, 2020, Article number 107126, pages 1-17, ISSN 1389- 1286, https://doi.org/10.1016/j.comnet.2020.107126.
(**http://www.sciencedirect.com/science/article/pii/S1389128618309228**)
(**Impact Factor:3.111**)

2. "Enhancing live virtual machine migration process via optimized resource allocation in next generation mobile edge network: A hybrid evolutionary approach", Roy, A., Midya, S., Majumder, K., Phadikar, S., Int J Commun Syst. 2020, Volume 33, Issue 12, pp. 1-26, Article number e4442, ISSN: 10745351, Publisher: John Wiley and Sons Ltd, DOI:10.1002/dac.4442 , Impact Factor: 1.319

3. "Distributed resource management in dew based edge to cloud computing ecosystem: A hybrid adaptive evolutionary approach.", Roy, A, Midya, S, Majumder, K, Phadikar, S. , Trans Emerging Tel Tech. 2020;e4018, Publisher: John Wiley and Sons Ltd, **https://doi.org/10.1002/ett.4018**, Impact factor:1.594

Books/Book Chapter Published:
1. Ghosh A., Majumder K., De D. (2021) A Systematic Review of Digital, Cloud and IoT Forensics. In: Chakraborty M., Singh M., Balas V.E., Mukhopadhyay I. (eds) The "Essence" of Network Security: An End-to-End Panorama. Lecture Notes in Networks and Systems, vol 163. Springer, Singapore. Print ISBN: 978-981-15-9316-1, Online ISBN: 978-981-15- 9317-8, **https://doi.org/10.1007/978-981-15-9317-8_2**

2. Majumder K., Chakrabarti K., Shaw R.N., Ghosh A. (2021) "Genetic Algorithm-Based Two-Tiered Load Balancing Scheme for Cloud Data Centers". In: Bansal J.C., Fung L.C.C., Simic M., Ghosh A. (eds) Book Titled "Advances in Applications of Data-Driven Computing". Part of the Advances in Intelligent Systems and Computing book series (AISC, volume 1319), Springer, Singapore. Print ISBN: 978-981-33-6918-4, Online ISBN: 978-981-33-6919-1, **https://doi.org/10.1007/978-981-33-6919-1_1**

3. S. Nandi, S. Phadikar and K. Majumder, "Detection of DDoS Attack and Classification Using a Hybrid Approach," 2020 Third ISEA Conference on Security and Privacy (ISEAISAP), Guwahati, India, 2020, pp. 41-47, doi: 10.1109/ISEA-ISAP49340.2020.234999. Publisher: IEEE

4. "Vulnerability of Cloud: Analysis of XML Signature Wrapping Attack and Countermeasures", Subrata Modak, Koushik Majumder , Debashis De. International Conference on Frontiers in Computing and Systems (COMSYS-2020), 13th to 15th January 2020, Organised by Department of Computer Science and Engineering and Electronics and Communication Engineering, Jalpaiguri Government Engineering College, Jalpaiguri, West Bengal, India

5. Modak S., Majumder K., De D. (2021) Vulnerability of Cloud: Analysis of XML Signature Wrapping Attack and Countermeasures. In: Bhattacharjee D., Kole D.K., Dey N., Basu S., Plewczynski D. (eds) Proceedings of International Conference on Frontiers in Computing and Systems. Part of the Advances in Intelligent Systems and Computing book series (AISC), vol 1255. Springer, Singapore. Print ISBN:978-981-15-7833-5, Online ISBN:978-981-15-7834-2, https://doi.org/10.1007/978-981-15-7834-2_70

6. Ghosh A., Majumder K., De D. (2021) Android Forensics Using Sleuth Kit Autopsy. In: Giri D., Buyya R., Ponnusamy S., De D., Adamatzky A., Abawajy J.H. (eds) Proceedings of the Sixth International Conference on Mathematics and Computing. Part of the Advances in Intelligent Systems and Computing book series (AISC), vol 1262. Springer, Singapore. Print ISBN:978-981-15-8060-4, Online ISBN:978-981-15-8061-1, https://doi.org/10.1007/978-981-15-8061-1_24

7. Sadhukhan S., Sing M., Majumder K., Chatterjee S., Sarkar S. (2021) A Survey on Security on Medical Data and Images in Healthcare Systems. In: Gunjan V.K., Zurada J.M. (eds) Proceedings

of International Conference on Recent Trends in Machine Learning, IoT, Smart Cities and Applications. Part of the Advances in Intelligent Systems and Computing book series (AISC), vol 1245. Springer, Singapore.Print ISBN:978-981-15-7233-3, Online ISBN:978-981-15-7234-0, https://doi.org/10.1007/978-981-15-7234-0_44

8. Ghosh A., De D., Majumder K. (2021) A Systematic Review of Log-Based Cloud Forensics. In: Smys S., Balas V.E., Kamel K.A., Lafata P. (eds) Book Title: Inventive Computation and Information Technologies(Proceedings of ICICIT 2020). Series Title: Lecture Notes in Networks and Systems, vol 173. Springer, Singapore. Print ISBN:978-981-33-4304-7, Online ISBN: 978-981-33-4305-4, https://doi.org/10.1007/978-981-33-4305-4_26 (**Also presented paper in this Conference**)

9. Chakraborty A., Chatterjee S., Majumder K., Shaw R.N., Ghosh A. (2022) A Comparative Study of Myocardial Infarction Detection from ECG Data Using Machine Learning. In: Bianchini M., Piuri V., Das S., Shaw R.N. (eds) Book Title: Advanced Computing and Intelligent Technologies. Part of the Lecture Notes in Networks and Systems book series (LNNS), vol 218. Springer, Singapore. Print ISBN: 978-981-16-2163-5, Online ISBN: 978-981-16-2164-2, https://doi.org/10.1007/978-981-16-2164-2_21 (Proceedings of the 2021 International conference on Advanced Computing and Intelligent Technologies(ICACIT 2021), Jointly organized by School of Computing Science and Engineering (SCSE) Galgotias University, India, School of Electrical, Communication & Electronics Engineering (SEECE) Galgotias University, India and Department 0f Information Engineering and Mathematics Università Di Siena, Italy on March 20-21, 2021| Online WebEx)

11. Avishek Banerjee,Sudip Kumar De, Koushik Majumder, Victor Das, Debasis Giri, Rabindra Nath Shaw, Ankush Ghosh (2022), Construction of Effective Wireless Sensor Network for Smart Communication Using Modified Ant Colony Optimization Technique. In: Bianchini M., Piuri V., Das S., Shaw R.N. (eds) Book Title: Advanced Computing and Intelligent Technologies. Part of the Lecture Notes in Networks and Systems book series (LNNS), vol 218. Springer, Singapore. Print ISBN: 978-981-16-2163-5, Online ISBN: 978-981-16-2164-2, https://doi.org/10.1007/978-981-16-2164-2_22 (Proceedings of the 2021 International conference on Advanced Computing and Intelligent Technologies(ICACIT 2021), Jointly organized by School of Computing Science and Engineering (SCSE) Galgotias University, India, School of Electrical, Communication & Electronics Engineering (SEECE) Galgotias University, India and Department 0f Information Engineering and Mathematics Università Di Siena, Italy on March 20-21, 2021| Online WebEx)

Research Projects:
Co-Chief Investigator of the project entitled "Information Security Education and Awareness (ISEA) Project (Phase-II)" under the Scheme viz. 'Digital India and Manpower Development' sponsored by Department of Electronics and Information Technology (DeitY) , Ministry of Communications and Information Technology, Electronics Niketan, 6, CGO Complex, New Delhi - 110003

PhD Guided:

1. Ms. Moutishi Singh successfully defended her Doctor of Philosophy (Ph.D) thesis in the discipline of Computer Science & Engineering under the category **Technology** on 12th March, 2020. **Title of the Thesis: Some Studies on Computer Networking & Data Security**

2. Mr. Sadip Midya has submitted his thesis to the Maulana Abul Kalam Azad University of Technology, West Bengal on February 26, 2021 for the degree of Doctor of Philosophy (Ph.D). PhD Registration Number: PhD/Tech/CSEIT032/2017, Registration Date: 08/03/2017 **Thesis Title: Performance Enhancement of Internet of Vehicles and Vehicular Clouds**

3. Ms. Asmita Roy has submitted her thesis to the Maulana Abul Kalam Azad University of Technology, West Bengal on February 26, 2021 for the degree of Doctor of Philosophy (Ph.D). PhD Registration no - PhD/Tech/CSEIT033/2017 Registration Date - 08/03/2021 **Thesis title - Quality of Service Optimization in 5th Generation Heterogeneous Mobile Cloud Network.**

RUPALI PATUA
Assistant Professor

Qualifications : B. Tech & M.Tech (MAKAUT)

Seminar/Webinar organized/participated in 2020-21:
Webinar participated:

Webinar	Date
AI in Computational Genetics: Healthcare Issues	10th Aug 2020
Internet of Things: Healthcare Application and Cyber Security Challenges	16th July 2020
Matlab and Simulink for IoT Application in Engineering	22nd June 2020
Robotics to Rural : Innovative Teaching and Research Approaches	26th June 2020
Automation, Robotics and Intelligence	27th July 2020

Webinar Organized:

Webinar	Date
Security of things and their low cost authenticated interaction in the world of IoT	3rd Aug 2020

Workshop organized/participated in 2020-21:
Workshop Participated:

Workshop	Date
5 day workshop on Big Data Analytics	13th Sep 2020 to 18th Sep 2020
5 Day online workshop on Challenges in Cyber Security and Cyber Crime	22nd Nov 2020 to 26th Nov 2020
5 Day Faculty Development Program on Data Science and Big Data Analytics	13th Jan 2020 to 17th Jan 2020
5 Day Faculty Development Program on Application of Artificial Intelligence & Machine Learning in Security	12th Oct 2020 to 16th Oct 2020
5 Day e-Faculty Training Program on Machine Learning Technologies for Social Media Analytics (An information security perspective)	19th Aug to 23rd Aug 2020
Online workshop on Accelerated Data Science	20th Feb 2021 to 21st Feb 2021
6 Days Short Term Training Program (STTP) on New Avenues of Emotion Recognition	23rd Aug 2021 to 28th Aug 20201

Workshop Organized:

Workshop	Date
5 Day Faculty Development Program on Internet of Things Security as an organizer	7th Nov 2020 to 11th Nov 2020
5 Day Faculty Development Program on Intelligent Computing as an Organizer	11th Sep 2020 to 15th Sep 2020

Invited Lectures in 2020-21:
Research Papers Published: Patua R., Muchhal T., Basu S. (2021) Gait-Based Person Identification, Gender Classification, and Age Estimation: A Review. In: Panigrahi C.R., Pati B., Mohapatra P., Buyya R., Li KC. (eds) Progress in Advanced Computing and Intelligent Engineering. Advances in Intelligent Systems and Computing, vol 1198. Springer, Singapore. https://doi.org/10.1007/978-981-15-6584-7_7
Books/Book Chapter Published: Patua R., Muchhal T., Basu S. (2021) Gait-Based Person Identification, Gender Classification, and Age Estimation: A Review. In: Panigrahi C.R., Pati B., Mohapatra P., Buyya R., Li KC. (eds) Progress in Advanced Computing and Intelligent Engineering. Advances in Intelligent Systems and Computing, vol 1198. Springer, Singapore. https://doi.org/10.1007/978-981-15-6584-7_7
Refresher/Orientation Courses: Orientation Course in CU HRDC.
Courses designed: I have designed syllabi for the following subjects
1. Object Oriented Programming (Code: PCC-CS503)
2. Computer Organization & Architecture (Code: PCC-CS402)
3. Computer Organization & Architecture Lab (Code:PCC-CS492)

4. IT Workshop (MATLAB/Python/R/SCILAB) (Code: PCC-CS303 and PCC-CS393)
5. Speech and Natural Language Processing (Code: CS801C)

Subhanjan Sarkar

Assistant Professor

Qualifications : B. Tech & M.Tech (CU)

Seminar/Webinar organized/participated in 2020-21: 2
Workshop organized/participated in 2020-21: 1
Books/Book Chapter Published: 1
Research Projects: 1 (Funded by DST,WB)
Courses designed: 3

Mihir Sing
Assistant Professor

Qualifications : B. Tech (CU), M.Tech(IIT Kharagpur)

Seminar/Webinar organized/participated in 2020-21: 01

Workshop organized/participated in 2020-212: 02

Books/Book Chapter Published:
Sadhukhan, Swarnali & Sing, Mihir & Majumder, Koushik & Chatterjee, Santanu & Sarkar, Subhanjan. (2021). A Survey on Security on Medical Data and Images in Healthcare Systems. 10.1007/978-981-15-7234-0_44.
Courses designed: 03 (Formal Language & Automata Theory, Compiler Design, Natural Language Processing)

Department of Information Technology

Head of the Department: Dr. Somdatta Chakravortty

Introduction of the Department:
Today's technological advancements require technology professionals, who can help companies to administer cutting edges technologies. The department of Information Technology is one of the oldest and biggest departments in the University. The Department of Information Technology (IT) at MAKAUT has been established with the aim to provide high quality education, which will result in producing IT Professionals having a skill set for establishing and maintaining IT infrastructures. The Department is keen to keep up with the rapid changes and latest advancements in the IT domain. Accordingly, the faculty exerts continuous efforts for the development of its learning, teaching, research and curriculum resources .

Name of the Centre : Centre for Geo-Informatics and Spatial Sciences

Name of the Coordinator: Dr. Somdatta Chakravortty

Introduction of the Department/Centre:
The Centre for Geo-Informatics and Spatial Sciences runs programs of PG Diploma and M.Tech in Geoinformatics. These programs are in collaboration with the Department of Science and Technology and Biotechnology, Govt. Of West Bengal. Faculty members from IT and Scientists of DST teach the students.

Courses Offered:

Sl.No.	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1	B.Tech in Information Technology	AICTE	4Years	60	Candidates having Engineering 'Merit Rank' in WBJEE	WBJEE
2	B.Sc in Information Technology (Artificial Intelligence)	UGC	3 years	30	Candidates having merit rank in CET	CET
3	B.Sc in IT (Cyber Security)					CET
4	B.Sc in IT (Data Science)					CET

5	BCA			60	Candidates having merit rank in CET	CET
6	MCA	AICTE	2years	60	Candidates having merit rank in JECA	JECA
7	M.Tech in Information Technology			30	Valid PGET (Post Graduate Entrance Test conducted by MAKAUT, WB) score card.	GATE / PGET
8	M.Tech. in Geoinformatics					PGET
9	M.Tech in Artificial Intelligence					
10	M.Tech in Data Science					
11	M.Tech in Information Security					
12	M.Tech in Internet of Things					
13	M.Sc in Data Science	UGC		30	B.Sc	CET
14	M.Sc in Artificial Intelligence			30	B.Sc	CET
15	M.Sc in Cyber Security			30	B.Sc	CET

Number of Students placed in 2020-21: 26 (15 students of B.Tech 4th year + 7 students of M.Tech + 4 students of B.Tech 3rd Year)

List of companies recruiting students from Dept of IT:

- Accenture
- Blackhawk Network
- Cognizant
- Subex
- Exavalu
- Sunera Technology
- AABSyS IT Pvt Ltd

- CloudKaptan Consultancy Services Pvt Ltd
- State Urban Development Agency - West Bengal Limited

Number of successful candidates in NET/GATE (2020-21): 5
- 3 students B.Tech 4th Year and 2 students from 3rd year

Students undergone for higher studies: 6 Students have applied for higher studies.

Field Projects/Internship undertaken by the students:
- Ardent Computech Pvt. Ltd
- Upgrad
- National Thermal Power Corporation(NTPC)Farakka
- NIVT Skills
- Vidyasagar University, Midnapore(Students have taken internship under guidance of Faculty member of University)
- CloudSEK Information Securities Pvt limited
- Vedas Technocrats Private Limited
- Infosys Limited
- Variable Energy Cyclotron Centre, Kolkata

Linkage with Institution/Industries:
- CDAC/ DST (WB),
- INDIAN SCHOOL OF ANTI - HACKING (ISAH)

Research Scholars awarded PhD during 2020-21: NA

Details of Support Staff:
1. Mr. Sanat Bose.
2. Mr. Ramkrishna Nath.
3. Ms. Bidyasri Goswami.
4. Ms. Saptadipa Majumder

No of Students from outside of the country : 2

No of Students from outside of the State: 53 (4 Students from M.Tech + 3 Students from B.Tech 4th Year + 18 Students from B.Tech 3rd Year + 13 Students from B.Tech 2nd Year +13 Students from B.Tech 1st year+12 Students from BCA, BSc)

List of new courses started in 2020-21:

Sl. No.	Courses started in 2020-2021	UG/PG/certificate
1	MCA	PG

2	M.Sc in Data Science	UG
3	M.Sc in Artificial Intelligence	UG

Whether there is any change in the Curriculum during the year:
- BCA and B.Sc (AI, Cyber Security, data Science) course structure design changed to CBCS from 2020-21 batch.

Whether any examination reform has been implemented during the year:
University has adopted the online examination pattern (multiple choice questions) due to the prevailing pandemic situation.

List of Faculty(2020-2021):

Sl. No.	Name of Faculty Members	Present Designation	Area of Specialisation / Research Interest
1	Dr. Somdatta Chakravortty	Associate Professor, HOD	Satellite Image Processing, Machine Learning
2.	Prof. Swapan Bhattacharya	Chair Professor	Algorithms, Software Engineering
3	Dr. Debasis Giri	Associate Professor	Cryptography, Network Security
4	Dr. Jadav Chandra Das	Assistant Professor	QCA, Reversible logic design, Cryptography
5	Ms. Sayantani Saha	Assistant Professor	Data Security
6	Ms.Bipasha Mahato	Faculty(C)	Quality of Experience aware IoT.
7	Mr. Bappaditya Chakraborty	Faculty(C)	Machine Learning, Document analysis
8	Ms. Dipanwita Ghosh	Assistant Professor	Satellite Image Processing, Machine Learning
9	Ms. Dipika Dhara	Assistant Professor	Satellite Image Processing, Machine Learning ,Deep Learning

10	Mr. Jaybrata Chakraborty	Faculty(C)	Data privacy and Access Control
11	Mr. Joy Samadder	Assistant Professor	IoT, Cyber Security
12	Ms. Kamalika Bhattacharya	Assistant Professor	WSN, UWSN, IoT, IoUT
13	Dr. Aniruddha Dey	Assistant Professor	Image Processing, Soft Computing
14	Ms. Sayani Manna	Assistant Professor	Machine Learning, Image processing
15	Ms. Anindita Das Bhattacharjee	Assistant Professor	Machine Learning, Evolutionary Algorithms
16	Mr. Gourav Mondal	Assistant Professor	Machine Learning using R and Python, Attribute Based Access Control, Advanced Machine Learning

Faculty Profile

Dr. Somdatta Chakravortty
Associate Professor & HoD

Qualifications : Phd

Seminar/Webinar organized/participated in 2020-21:
Organised:
1. Webinar Series on ''Applications of Artificial Intelligence on Geospatial Data''(3 webinars in June, 2020)
2. Data Mining and Applications(20th June, 2020)

Participated:
1. Virtual National Workshop on Sponsored Research Projects(Opportunities, Procedures and Best Practices) by Engineering Staff College of India(24th and 25th June, 2021)

Workshop organized/participated in 2020-21:

Organised:
1. 5 day Workshop on ''Artificial Intelligence and its Applications'' jointly with CDAC, Kolkata(16th November, 2020-29th November, 2020)
2. 5 day TEQIP Sponsored Workshop on ''Big Data Analytics''(13th September, 2020- 18th September, 2020)

Invited Lectures in 2020-21:

1. Invited Lecture in 1-week online Faculty Development Program (FDP) on the theme "Recent Research Challenges in Computer Science and Applications" at RCC Institute of Information Technology during 23-11-2020 to 27-11-2020.
2. Invited Talk on ''NAAC Accreditation'' in Workshop on NAAC Accreditation Process at National University of Juridical Sciences(NUJS) on 7th June 2021

Research Papers Published:

1. S Das, S Chakravortty, ''Efficient entropy-based spatial fuzzy c-means method for spectral unmixing of hyperspectral image'', Soft Computing,Springer, 25(11) pp 7379-7397, 2021
2. P Kumar, S Chakravortty, ''Generation of sub-pixel-level maps for mixed pixels in hyperspectral image data'', Current Science, 120(1) pp 166-176, 2021
3. S Das, S Chakravortty, ''A Novel Local Consensus Inspired Spatial Fuzzy Method for Classification and Spectral Unmixing of Hyperspectral Data'', Proceedings of the International Conference on Computing and Communication Systems, Springer: I3CS 2020, NEHU, Shillong, India.
4. S Das, S Chakravortty, ''Identification of Interfaces of Mixtures with Nonlinear Models'', Proceedings of the Global AI Congress, Springer, 2020

Books/Book Chapter Published:

1. D Ghosh, S Chakravortty, ''Change detection of tropical mangrove ecosystem with subpixel classification of time series hyperspectral imagery'' in Artificial Intelligence Techniques for Satellite Image Analysis,Springer(pp189-211), 2020

Research Projects:

1. DST sponsored major research project entitled "Development of algorithms for spectral unmixing and subpixel classification of hyperspectral image data''

MoU/Collaboration:

Research Collaboration:
1. Regional Remote Sensing Centre, NRSC, ISRO
2. University of Extremadura, Spain
3. Sun Yat Sen University, China

PhD Guided:

4 registered PhD Scholars

Courses designed:

Satellite Image Processing, Spatial Data Science

Professional Activities:

Member of Professional Societies:
1. Institution of Engineers
2. Indian Society of Remote Sensing
3. Computer Society of India
4. Association of Engineers

Any other information:

1. Director, Internal Quality Assurance Cell
2. Head, Department of Information Technology
3. Coordinator, Centre of Geoinformatics and Spatial Sciences
4. Coordinator, Centre for Digital Pedagogy

Dr. Debasis Giri
Associate Professor

Qualifications : Phd

Seminar/Webinar organized/participated in 2020-21:
1. 5-Day Workshop organized on Cloud, IoT and Data Science Applications, MAKAUT,WB and IUST   18th – 22th Sep., 2020
2. 5-Day Workshop organized on Cryptology, MAKAUT,WB and IUST 15th – 19th Sep., 2020
3. Short Term Training Programme organized on Cybersecurity during June 14-19, 2021
4. Webinar series organized on Cryptography, Network Security and Cybersecurity (total count: 11)

Invited Lectures in 2020-21:
1. 6th International Conference on Mathematics and Computing (ICMC 2020) September 23-25, 2020 organized by Sikkim University
2. International Conference on IoT and its Applications (ICIA-2020) on December 27, 2020 organized by NIT Jamshedpur
3. FDP on "Foundation for Innovation in Interdisciplinary Cyber Physical System" during April 26-30, 2021 by Haldia Institute of Technology
4. Five Days Faculty Development Programme (FDP) On 'IoT and Cyber Security' during 21 June 2021 to 25 June 2021 organized by IEM Kolkata

Research Papers Published:

1. Tanmoy Maitra, Shiwangi Singh, Ritwik Saurabh and **Debasis Giri**, Analysis and Enhancement of Secure Three-Factor User Authentication using Chebyshev Chaotic Map, Journal of Information Security and Applications (accepted)
2. S Das, MS Obaidat, S Barman, **D Giri**, Novel Multiparameter Detection and Recovery Technique for Diverse Network Systems, IEEE Systems Journal (Accepted)
3. Ashok Kumar Das, Basudeb Bera, and **Debasis Giri**, AI and Blockchain-Based Cloud-Assisted Secure Vaccine Distribution and Tracking in IoMT-Enabled COVID-19 Environment, IEEE IoT Magazine, [4(2)](): 26-32 (2021)
4. Rajdeep Chatterjee, Saptarshi Mazumdar, R. Simon Sherratt, Rohit Halder, Tanmoy Maitra, **Debasis Giri**, Real-Time Speech Emotion Analysis for Smart Home Assistants. IEEE Trans. Consumer Electron.67(1): 68-76 (2021)
5. Zeeshan Alia, Anwar Ghania,Imran Khana, Shehzad Ashraf Chaudhryb, SK Hafizul Islamc, and **Debasis Giri**, A Secure Authentication and AccessControl Protocol for Securing Wireless Healthcare Sensor Networks, Journal of Information Security and Applications (Elsevier), 52: 102502 (2020)

Books/Book Chapter Published:

Tanmoy Maitra, **Debasis Giri** and Arup Sarkar, Security in Critical Communication for Mobile Edge Computing based IoE Applications, Mobile Edge Computing, Springer Publisher, 2021

PhD Guided: 01

Professional Activities:
1. Associate Editor of the Journal of Information Security and Applications (Elsevier)
2. Associate Editor of the Security and Privacy Journal (Wiley)
3. Associate Editor of the Journal of International Journal of Communication Systems (Wiley)
4. Associate Editor in the Journal of Security and Communication Networks

Dr. Jadav Chandra Das

Assistant Professor

Qualifications : Phd

Seminar/Webinar organized/participated in 2020-21:
1. The International Education & Skill Summit-TIESS Virtual 2021, 27th – 30th Jan., 2021
2. Webinar on: "IEEE Xplore: Search vs. Research", MAKAUT,WB 30th July, 2020.
3. WEBINAR ON "Cryptography, Network Security and Cyber Security" Special Session on Data and Applications Security and Privacy, MAKAUT,WB and IUST 26th Sep., 2020

Workshop organized/participated in 2020-21:
1. Online Workshop /Faculty-Development-Programme   on Recent Research Trends in Information Technology, IUST and MAKAUT,WB   12th – 18th Sep., 2020
2. 5-Day Workshop on Cloud, IoT and Data Science Applications, MAKAUT,WB and IUST   18th – 22th Sep., 2020
3. 5-Day Workshop on Cryptology, MAKAUT,WB and IUST 15th – 19th Sep., 2020
4. 5-Day Workshop on Big Data Analytics, MAKAUT,WB and IUST, 13th – 18th Sep., 2020
5. 5-Day workshop on "Machine Learning in Data Science" B. P. Poddar Institute of Management and Technology, West Bengal, August 11-15, 2020.

Research Papers Published:
1. J. C. Das, D. De, "Reversible priority encoder design and implementation using quantum-dot cellular automata," IET Quantum Communication, vol. 1, No. 2, pp. 72-78, Dec., 2020, doi: 10.1049/iet-qtc.2020.0009.
2. B. Debnath, J. C. Das, D. De, F. Ghaemi, A. Ahmadian, N. Senu, "Reversible Palm Vein Authenticator Design With Quantum Dot Cellular Automata for Information Security in Nanocommunication Network," IEEE Access, vol. 8, pp. 174821-174832, Sep., 2020, doi: 10.1109/ACCESS.2020.3025822.
3. J. C. Das, D. De, "Design of thermometer code-to-gray code converter circuit in quantum-dot cellular automata for nano-computing network," Photonic Network Communications, vol. 41, pp. 259–273, June, 2021, doi: 10.1007/s11107-021-00937-9.

Refresher/Orientation Courses:
1. STTP on "Hands on Training on Art Writing Technical Paper", MAKAUT,WB   1st june-6th June, 2021.
2. FDP on Current Topics and Tools of Applied Physics in Science, Engineering and Technology, MAKAUT,WB and IUST   12th -16th Oct., 2020.
3. FDP on Internet of Things Security, MAKAUT,WB and IUST 7th – 11th Nov., 2020.
4. FDP on Intelligent Computing ", MAKAUT,WB and IUST   11th – 15th Sep., 2020
5. Online Elementary FDP on "IoT & Cyber Security"   AICTE Training And Learning (ATAL) Academy,   21th – 25th June, 2021

Professional Activities:
- Member of NBA Committee.
- Member of NAAC Committee.
- Member of BOS Committee.

Any other information:
- Coordinator of M.tech in IT (IoT)
- Coordinator of MCA program
- Joint coordinator of M.Tech Projects Panel.

Ms. Sayantani Saha

Assistant Professor

Qualifications : Mtech

Seminar/Webinar organized/participated in 2020-21: Short Term Training Programme organized on Cybersecurity during June 14-19, 2021 (technical team)

Workshop organized/participated in 2020-21: 5 day Workshop on 'Big Data Analytics ' 13.09.2020- 18.09.2020. (organised)

Courses designed: B.Tech in IoT, Cyber Security and Blockchain Technology

Professional Activities:
- Member of NBA Committee.
- Member of NAAC Committee.
- Member of BOS Committee.

Any other information: Coordinator of BTech (IT)

Ms. Dipanwita Ghosh
Assistant Professor(C)

Qualification: B.Tech, M.Tech, PhD(pursuing)

Seminar/Webinar organized/participated in 2020-21:

Online FDP on "Artificial Intelligence" organized by AICTE Training And Learning (ATAL) Academy.

Online line FDP on "Future Skill training on AI – ML" organized by KITE (TEQIP), IIT Indore.

Online Course on "Data Science and Curation: Spatial Data S   Science" organized by Technology Innovation Hub, Indian   Statistical Institute , Bangalore.

 Online Workshop on " Big Data Analytics" organized by Tata Consultancy Service.

Online Workshop on "Artificial Intelligence and it's   Applications", organized by CDAC & MAKAUT.

Books/Book Chapter Published:
Ghosh, D., & Chakravortty, S. (2020). Change detection of tropical mangrove ecosystem with subpixel   classification of time series hyperspectral imagery. In   *Artificial Intelligence Techniques for Satellite Image Analysis* (pp. 189-211). Springer, Cham.

Courses designed:
   B.Sc / M.Sc. in IT(AI), M.Tech in AI

Professional Activities:
- Member of NBA Committee.
- Member of NAAC Committee.
- Member of BOS Committee.

Any other information:
- Coordinator of M.tech in IT (AI)
- Coordinator of M.Sc(AI)
- Coordinator of B.Sc(AI)

Ms. Dipika Dhara

Assistant Professor

Qualifications : M.Tech, PhD (Pursuing)

Seminar/Webinar organized/participated in 2020-21:
- Participated in Webinar in Application of Artificial Intelligence on Geo-Spatial Data on 13.06.2020
- Participated in Webinar in MATLAB for Engineering Practice, Science, and Research on 11.06.2020
- Participated in Webinar in Machine and Deep Learning with MATLAB for Engineering Applications on 16.06.2020
- Participated in Webinar in Data Mining and Application on 20.06.2020

Workshop organized/participated in 2020-21:
- Artificial Intelligence & its Applications on 16/11/2020 to 20/11/2020

- Artificial Intelligence an AICTE Training And Learning (ATAL) Academy Online FDP on 14/09/2020 to 18/09/2020
- Data Sciences an AICTE Training And Learning (ATAL) Academy Online FDP on 07/09/2020 to 11/09/2020
- Online FDP on Next Generation Databases Future Databases Engineering an AICTE Training And Learning (ATAL) Academy Online FDP on 01/07/2021 to 05/07/2021
- Artificial Intelligence and Machine Learning a FDP Organized by IIT Kanpur on 14/07/2021 to 24/04/2021

Research Papers Published:
- Chowdhury,S. Dhara, D. Chowdhury , S. Haldar ,P.   Chatterjee, K. Bhattacharya, T.K (2021) "A novel approach toward microstructure evaluation of sintered ceramic materials through image processing techniques", Applied Ceramic Technology, 18(3) pp.773-780

Refresher/Orientation Courses:
- Introduction to Machine Learning Jan' 2020 to April' 2020 from NPTEL.
- Data Analytics with Python Jan' 2020 to April' 2020 from NPTEL.
- Hadoop Platform and Application Framework on May 05 2020 from Coursera
- AI for Everyone on 13th May 2020 from Coursera
- Business Analytics for Decision Making on 2nd June 2020 from Coursera
- Computer Vision –Image Basics with OpenCV and Python on 15 June 2020, Coursera Project Network
- Image Classification with CNNs using Keras on 14 June 2020, Coursera Project Network
- Logistic Regression with Python on 15 June 2020 , Coursera Project Network

Courses designed:
    B.Sc / M.Sc. in IT(Data Science)
    B.Sc / M.Sc. in IT(Big Data Analytics)
    M.Tech in Data Science

Professional Activities:
- Member of NBA Committee.
- Member of NAAC Committee.
- Member of BOS Committee.

Any other information:
- Coordinator of M.tech in IT (DS)
- Coordinator of M.Sc(DS)
- Coordinator of B.Sc(DS)
- Coordinator of B.Sc(BDA)

Mr. Jaybrata Chakraborty

Contractual Faculty

Qualifications : M.Tech

Professional Activities:
Conducting departmental exam, Member of NBA, NAAC, Routine Committee

Mr. Joy Samadder

Assistant Professor

Qualifications : M.Tech

Seminar/Webinar organized/participated in 2020-21:

- Cryptography, Network Security and Cyber security, MAKAUT,WB Online August 06, 2020

Workshop organized/participated in 2020-21:

- IoT Security CDAC Online August 28-29, 2020
- Cyber Security Pledge Govt. of West Bengal, Online October, 2020
- Microsoft Innovative Educator Microsoft Online October 10, 2020

Invited Lectures in 2020-21:
Invited lecture sessions on 15th December, 2020 at Sashastra Seema Bal, Kolkata Topic: Smartphones and Mobile Applications
Refresher/Orientation Courses:
- Faculty Development Program on Data Science and Big Data Analytics, ICT Academy & MAKAUT,WB, 13-01.2020- 17.01.2020
- Responsive Web Design University of London, Coursera April 23, 2020
- Cybersecurity Roles, Processes & Operating System Security, IBM Coursera July 6, 2020
- Google Ads for Beginners Coursera Project Network, Coursera July 5, 2020

- Clustering Geolocation Data Intelligently in Python, Coursera Project Network, Coursera May 1, 2020
- RESTful API with HTTP and JavaScript Coursera Project Network, Coursera April 28, 2020
- Programming for Everybody (Getting Started with Python) University of Michigan, Coursera April 28, 2020
- Use Canva to Create Social Media Marketing Designs, Coursera Project Network, Coursera April 23, 2020
- Technical Support Fundamentals Google Coursera April 14, 2020
- Introduction to Cybersecurity Tools & Cyber Attacks , IBM Coursera April 14, 2020
- Responsive Website Basics: Code with HTML, CSS, and JavaScript, University of London, Coursera April 13, 2020
- Cyber security and the Internet of Things, University System of Georgia, Coursera , April 9, 2020
- The Fundamentals of Digital Marketing, Google Google Digital Unlocked, July 05, 2020

Courses designed: B.Sc / M.Sc. in Cyber Security

Professional Activities: Developer of University / Departmental / Alumni website, Member of NBA and NAAC Committee.

Any other information: Coordinator of B.Sc. IT Cyber Security**,** Secretary of MAKAUT,WB Alumni Association

Kamalika Bhattacharjya

Assistant Professor

Qualifications : M.Tech

Seminar/Webinar organized/participated in 2020-21:
- Organizing member, FDP on Data Science and Big Data Analytics, MAKAUT, 2020
- Organizing member, Poster competition on Science, Technology, Engineering & Management, 'STEM-2020'.
- Webinar in MATLAB for Engineering Practice, Science, and Research, MAKAUT, WB, 11.06.2020
- Webinar in Application of Artificial Intelligence on Geo-Spatial Data,MAKAUT, WB, 13.06.2020
- Webinar in Machine and Deep Learning with MATLAB for Engineering Applications,MAKAUT, WB , 16.06.2020
- E-CONCLAVE on Women Entrepreneurs, MAKAUT, WB , 16.06.2020

Workshop organized/participated in 2020-21:

Faculty Development Program on Data Science and Big Data Analytics, ICT Academy & MAKAUT, 13-01.2020-1 7.01.2020

Research Papers Published:

Bhattacharjya, K., & De, D. (2021). IoUT: Modelling and simulation of Edge-Drone-based Software-Defined smart Internet of Underwater Things. *Simulation Modelling Practice and Theory*, *109*, 102304.https://doi.org/10.1016/j.simpat.2021.102304

Refresher/Orientation Courses:

- Technical support fundamentals, Google, Coursera, April, 2020
- Introduction to the Internet of Things and embedded system, University of California, Irvine, Coursera, April, 2020
- AWS Fundamentals: Going cloud-native,Amazon Web Services, Coursera, April, 2020
- The bits and bytes of computer networking,Google, Coursera, May, 2020
- Fundamentals of network communication, University of Colorado System,Coursera, May, 2020
- Computer Architecture, Princeton University,Coursera, June, 2020

Courses designed: B. Sc & M. Sc in Internet of Things

Professional Activities:

- Member of NBA Committee.
- Member of NAAC Committee.
- Member of BOS Committee.

Any other information:

- Coordinator of B.Sc. IT Internet of Things
- Coordinator of subject distribution.

Dr. Aniruddha Dey

Assistant Professor

Qualifications: PhD

Seminar/Webinar organized/participated in 2020-21:

Faculty Development Program on AI and Deep Learning & Compiler front end and back end , KIIT, Bhubaneswar, 20-06.2021- 26.06.2021

Faculty Development Program on Emerging Trends in Machine Learning & Signal Processing, KIIT, Bhubaneswar, 20-06.2021- 26.06.2021

Faculty Development Program on Augmented Reality & Virtual Reality, AISSMS, Pune, 21-06.2021- 25.06.2021.

STTP on "Tools and Techniques for Machine Learning and its Applications ", MAKAUT,WB5th july -10th July, 2021.

Invited Lectures in 2020-21:
Towards Data Science in Greater Kolkata College of Engineering and Management on 19th june 2021.

Research Papers Published:
S. Bhattacharya, M. Ghosh, A. Dey, "Face Detection in unconstrained environments using Modified Multitask Cascade Convolutional Neural Network", *Proceeding of the ICI2C 2021,* 2021. (*Accepted*)

M. Ghosh, A. Dey, A. Ghosh "Robust face recognition by fusing Fuzzy Type 2 induced multiple facial fused image", *Proceeding of the GUCON 2021,* 2021. (*Accepted*)

M. Mukhopadhyay, A. Dey, A. Ghosh "Facial emotion recognition based on Textural pattern and Convolutional Neural Network", *Proceeding of the GUCON 2021,* 2021. (*Accepted*)

PhD Guided: 01
Professional Activities:
- Member Institute of Engineers (M-164731-2), India Kolkata Section.
- Member (Member number: 93636080) IEEE Computer Society Technical Committee on Learning Technology.

Any other information:
- Member of NBA Committee.
- Member of NAAC Committee.
- Member of BOS Committee.

Ms. Sayani Manna

Assistant Professor

Workshop organized/participated in 2020-21:
- AICTE Training And Learning (ATAL) Academy Online FDP on "Data Sciences" at Indian Institute of Information Technology Vadodara.

- Online 12 day Faculty Development Programme on "Mentoring for Mental Well-Being of University Students"

- Online FDP on "Emerging Concepts in Modern Computational Systems (ECMCS)"

Courses designed:
Preparation and Modification of BCA Course syllabus.

Professional Activities:
- Member of NBA Committee.
- Member of NAAC Committee
- Responsible for MAR data coordination and entry for department of IT

Any other information:
- Coordinator of BCA
- WB SET Qualified

Ms. Anindita Das Bhattacharjee

Assistant Professor

Seminar/Webinar organized/participated in 2020-21:
Organized Entrepreneurship Webinar Program (12 sessions on different topics with hands-on) conducted by Think Again Lab.
»Co-Ordinated Interactive Webinar on Artificial Intelligence, Data Science & Big Data Analytics on June 27, 2021.

Workshop organized/participated in 2020-21:
»Attended 10 days Future Skilled program on "Artificial Intelligence and Machine Learning (AI & ML)" under the TEQIP-III organized by IIT Indore from 16th − 26th June, 2021.

Research Papers Published:
Short-Term Solar Irradiance Forecasting using Long Short Term Memory Variants in 2nd International Conference on Data Science and Applications (ICDSA 2021) will be published in **SCOPUS** Indexed Springer Book Series "**Lecture Notes in Networks and Systems**" **(LNNS)**

Books/Book Chapter Published:
Book Chapters: Published in Intelligent Analysis of Multimedia Information (Single Author)
» Chapter 1: Foundation of Multimedia Information Processing
» Chapter 3: Feature Extraction
Publisher's Name: IGI GLOBAL PUBLICATION
Indexed-in: SCOPUS and Information Resources Management Association (IRMA)

Books : *Fundamental Concepts of Artificial Intelligence with Applications* **Author:** Anindita Das Bhattacharje   **Published:** January, 2021 **Publisher:** Shroff Publishers & Distributers PVT. LTD (SPD)   **ISBN:** 978-93-8588-987-5

Courses designed: MCA 1st Year Introduction to Artificial Intelligence. MCAD101C

Patents/IPR Generated:
Title of Invention: "Think ground Micro-controller based Development Board"
Application number: 201731022088
Inventor: Arijit Hajra & Anindita Das Bhattacharjee
Source: Indian Patent Advanced Search System under Intellectual Property India
 https://ipindiaservices.gov.in/

Professional Activities:
- Member of NAAC Committee.

Any other information:
- Personal Video - Blog Channel Link:
  https://www.youtube.com/channel/UC14EHWC3tfObFa-JonlCE0Q

- Mentoring ongoing University Data Science project.

- Represented Department in HR Conclave Program, 2021.

- Webinar Speaker: Topic: Artificial Intelligence Vs Machine Learning Vs Deep Learning and data Science
       »Sponsored by: *Times of India in* collaboration with *TECHGIG*
       »Date: 20th February 2019.
- FDP Delivered
  »Topic: Hands on R Programming on Data Science for Time Series Data Analysis in Advance Engineering and Mathematics.
  »University Name: Maulana Abul Kalam Azad University of Technology
  »Organized by: *Department of Microelectronics and VLSI Technology, School of Engineering and Sciences (MAKAUT).*
  »Date: *17th to 19th September, 2020*

Ms. Bipasha Mahato

Faculty(C)

Qualifications: M.Tech

Professional Activities: Departmental BoS attend, course material design, question bank preparation, lab and theory exam evaluation

Mr. Bappaditya Chakraborty

Faculty(C)

Qualifications : BCA, MCA

Professional Activities: Teaching-learning, Exam control, Syllabus Preparation, Conference organization, Admission process coordination for BCA, Responsible for MAR data coordination and entry for department of IT

School of Management Sciences
Prof. (Dr.) Indranil Mukherjee

Director

Introduction about the School: During the 2019-20 academic session, the School of Management Sciences has expanded considerably in terms of the breadth of the courses introduced, the projects initiated, the trainings offered, and the consultancy activities undertaken. The school now offers an array of Management courses at both UG and PG levels ranging from General BBA and MBA to those in Analytics, Digital Marketing, Travel and Tourism to Hospital Administration. The school has started offering Management Development Programmes and plans to roll out a training calendar shortly. The school has also embarked on consultancy activities and plans to ramp up such initiatives. The school helped organize a series of webinars during the pandemic-induced lockdown period, with focus on digital pedagogy, entrepreneurship, digital marketing, state of higher education etc. The school has tried to connect with prospective students through the School Connect programme launched by the University.

The school aims to churn out individuals who will be professionals with an empathetic mindset, people who will have a holistic view of the world and provide solutions to pressing problems, whether at societal, individual or corporate level, by leveraging their knowledge and skillsets, people who will be lifelong learners and can deliver not only as an individual but in a team. We put maximum stress on co-learning of students and the teachers, expose the students to the huge digital resources available and extensively use analytical tools and techniques to "measure" the progress of our students. The teachers and students will stand shoulder to shoulder to implement our goals.

Thrust Areas of research: Cutting-edge research can help any organization stimulated and challenged. It ensures that they

themselves continue to learn. University research helps faculties to be 'lifelong learners'. University

research usually requires investment in state-of-the-art facilities. Modern teacher is basically a researcher, living a creative life with research. Each faculty member of this department is engaged

with research and dedicated to publish in quality journals as well as participating in conferences both

at national and international level. Each faculty member is actively working in their specialized

domain as well as interdisciplinary domain and publishing articles in quality journals (UGC–CARE

enlisted, ABDC ranked and so on). Faculties of SOMS is publishing in various domains like

marketing, consumer behaviour, entrepreneurship, Business Laws, Corporate Governance, Human

resources, Industrial Relations, Labour Laws, Business Ethics, Corporate Social Responsibility, human

resource, organizational behaviour, Finance, Accounts, Internal Audit, Management, Portfolio Management, Tourism & Hospitality, Hospital management and so on.

Initiative:

1. Introducing new courses as well as design of curriculum as per the latest trends and techniques that make a student industry ready.
2. The AICTE approved PG courses (MBA, MBA-BA, MBA(HA)) along with global acceptance ensuring promising infrastructural facilities.
3. Adoption of latest teaching pedagogy for management students.
4. Interactive webinars to assist interested candidates to select their right career path by creating

awareness about various opportunities associated with each course.
5. Encouraging and assisting each student for learning latest tools and techniques.
6. Continuous mentoring of students to improve motivational level, communication skills and solve any kind problem associated with learning.
7. Arrangement of special as well as remedial classes for students.
8. Assisting students for internships and placements.

Name of the Departments: i) Management (General)
ii) Hospital Management
iii) Travel & Tourism Management

Department of Management (General)
Heads of the Department:
Prof. Sujit Mukherjee (PG studies)
Ms. Debadrita Panda (UG studies)

Introduction of the Department: During the 2019-20 academic session, the School of Management Sciences has started its journey with 4 four UG level (BBA –General, BBA-Business Analytics and BBA in Hospital Management) and 2 PG level (MBA, MBA in Hospital Administration) courses. In the next year, it has expanded with more courses for keeping pace with latest trends and technology. From 2020-21 session it has introduced BBA in Digital Marketing and MBA in Business Analytics. It is continuously evolving with a set of diversified activities which include teaching, training, research and consulting which are considered to be four pillars of quality education. The Institute fosters and nurtures leaders of tomorrow who

are capable of making a difference in the society through their innovative approach, ethical values and wisdom.

Courses Offered:

Sl no	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1	BBA	UGC	3 Years	60	10+2 or equivalent passed from any recognised board with valid CET rank	Common Eligibility Test
2	BBA in Business Analytics	UGC	3 Years	30	10+2 or equivalent passed from any recognised board with valid CET rank	Common Eligibility Test
3	BBA in Digital Marketing	UGC	3 Years	30	10+2 or equivalent passed from any recognised board	Common Eligibility Test
4	MBA	AICTE	2 Years	120	Graduation or equivalent passed from any recognised University	Through any Central Test (CAT, MAT, XAT, CMAT etc.) or State Level Test (JEMAT)
5	MBA in Business Analytics	AICTE	2 Years	30	Graduation or equivalent passed from any recognised University	Through any Central Test (CAT, MAT, XAT, CMAT etc.) or State Level Test (JEMAT)

Department of Hospital Management

Name of the Head of the Department:
Prof. Sujit Mukherjee (PG studies)
Ms. Debadrita Panda (UG studies)

Introduction of the Department: During the 2019-20 academic session, the School of Management Sciences has started its journey with 1 UG level (BBA in Hospital Management) and 1 PG level (MBA in Hospital Administration) courses. It is continuously evolving with a set of diversified activities which include teaching, training, research and consulting which are considered to be four pillars of quality education. The Institute fosters and nurtures leaders of tomorrow who are capable of making a difference in the society through their innovative approach, ethical values and wisdom.

Courses Offered:

Sl no	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1	BBA in Hospital Management	UGC	3 Years	60	10+2 or equivalent passed from any recognised board	Common Eligibility Test
2	MBA in Hospital Management	UGC	3 Years	30	Graduation or equivalent passed from any recognised University	Through any Central Test (CAT, MAT, XAT, CMAT etc.) or State Level Test (JEMAT)

Department of Travel & Tourism Management
Name of the Head of the Department: Ms. Debadrita Panda (UG studies)

Introduction of the Department/Centre: During the 2019-20 academic session, the School of Management Sciences has started its journey with 1 UG level (BBA n Travel & Tourism Management). It is continuously evolving with a set of diversified activities which include teaching, training, research and consulting which are considered to be four pillars of quality education. The Institute fosters and nurtures leaders of tomorrow who are capable of making a difference in the society through their innovative approach, ethical values and wisdom.

Courses Offered:

Sl no	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1	BBA in Travel & Tourism Management	UGC	3 Years	30	10+2 or equivalent passed from any recognised board	Common Eligibility Test

List of Faculty:

Sl No	Name of the Faculty Member	Present Designation
1.	Prof. (Dr.) Indranil Mukherjee	Professor
2.	Prof. Sujit Mukherjee	Professor
3.	Prof. Jai Prakash Shaw	Adjunct Professor
4.	Prof. Subrata Kumar Ray	Adjunct Professor
5.	Debadrita Panda	Assistant Professor
6.	Dr. Debasish Dutta	Assistant Professor
7.	Surajit Malakar	Assistant Professor
8.	Subrata Ghosh	Assistant Professor
9.	Sarani Bhaumik	Assistant Professor
10.	Sayantani Ray	Assistant Professor
11.	Biswanath Saha	Assistant Professor

Number of Students placed in 2020-21: 198

Field Projects/Internship undertaken by the students: 2 from Intern Shala

Linkage with Institution/Industries:
   i)   National University of Juridical Sciences (NUJS)
   ii)   Calcutta Management Association (CMA)
   iii)   Bombay Stock Exchange (BSE)
   iv)   Braithwaite & Co. Limited, Govt of India
   v)   Garden Reach Shipbuilders & Engineers Ltd
   vi)   Mahatma Gandhi National Council of Rural Education (MGNCRE)

Details of Support Staff:

Sl No	Name	Act as

1	Koyel Dey	Academic & Administrative Coordinator

Students from outside of the country/state: State of Bihar and Jharkhand

List of new courses started in 2020-21:

Sl. No.	Courses started in 2020-21	UG/PG/certificate
1.	BBA in Digital Marketing	UG
2.	MBA in Business Analytics	PG

Whether there is any change in the Curriculum during the year: YES, CBCS structure implemented for all UG courses from and on 16th April,2021.

Whether any examination reform has been implemented during the year: None

Fellowship received by the faculty members for Advance Studies/Research: None

Futuristic Plans: Planning to start some other courses:
- ➢ Executive MBA programme
- ➢ Executive Programme in Business Analytics
- ➢ Diploma and Certificate courses in FinTech
- ➢ Diploma and Certificate courses in Digital Marketing
- ➢ Diploma and Certificate courses in Digital Health
- ➢ Diploma and Certificate courses in Digital Media

Other plans: i) Faculty Members may conduct regular Executive / Management Development Programs and carry out Training Needs Analysis for the Industries.
ii) Engaging more Student for Research Projects
iii) Evening and Weekend courses may be designed in varying formats wherein instructions may be offered by industry representatives.

Workshop/Seminar/Webinar/Other events in 2021-21:
- ▪ Career Prospects on BBA(TTM)
- ▪ Career Prospects on BBA(HM)
- ▪ Career Prospects on BBA, BBA(DM), BBA(BA)
- ▪ Earing from the Internet
- ▪ Lecture on Entrepreneurship
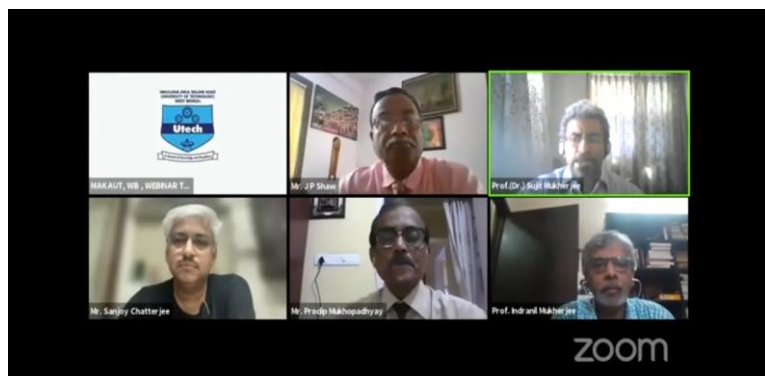
Faculty Profile:

Dr Indranil Mukherjee

Director

Qualifications: Ph.D

Dr Mukherjee obtained his B.Sc and M.Sc degrees from Jadavpur University and was awarded the University gold medals on both occasions. He obtained his Ph.D from Jadavpur University working with CSIR fellowship in the area of Nonlinear Integrable Systems. His current research interests are chiefly in the areas of data science and business analytics using data sets drawn from different areas of business, social sciences and environmental sciences. He also pursues research in non-linear dynamical systems. He has published around fifty papers in international journals, authored ten book chapters and has one patent filed to his credit. Three students have completed their Ph.D working under his supervision, one student is close to submitting her Ph. D while few others are working under his guidance. He has completed research projects funded by UGC (as PI), IUC-DAE (as co-PI), and BARC (as co-PI). He is currently the Director of the project "Centre of Excellence in Environmental Technology and Management" funded by MHRD under the FAST (Frontier Areas of Science & Technology) scheme.

Dr Mukherjee has more than twenty years of professional experience including working in software industry, teaching, training and research. He is also actively involved in the ongoing academic and administrative reform processes being undertaken in MAKAUT particularly in the fields of digital pedagogy, evaluation, placement and entrepreneurship. In addition to his normal roles and responsibilities, he has served as Controller of Examinations (Acting) from July 2014-July 2017 and as Registrar (Acting) from January 2018 to November 2018 and again from January 2019 to March 2019.

Publications (2020-21)

Journal Publications

1. Microbial consortium based conversion of dairy effluent into biofertilizer – Nabanita Halder, Mandakini Gogoi, Jaewria Sharmin, Manjila Gupta, Srimoyee Banerjee, Tethi Biswas, B.K.agarwala, L.M.Gantayet, M.sudarshan, Indranil Mukherjee, Arindam Roy, Shaon Ray Chaudhuri. Journal of Hazardous, Toxic and Radioactive Waste. (2020) 24(1):04019039-1to7.

2. Minimal medium optimization for soluble sulphate removal by tailor-made sulfate reducing bacterial consortium - Chaitali Chanda , Mandakini Gogoi , Indranil Mukherjee & Shaon Ray Chaudhuri. Bioremediation Journal. https://doi.org/10.1080/10889868.2020.1811633; (2020)

3. Optimization of bio-chemical degumming of Ramie fiber for improved strength & luster Shaon Ray Chaudhuria,, Mandakini Gogoi, Tethi Biswas, Soumya Chatterjee, Chaitali Chand, Ronald Jamatia, Ajoy Modak, Sunil K. Sett, Indranil Mukherjee. Biotechnology Reports 28 (2020) e00532

4. A novel strategy for microbial conversion of dairy wastewater into biofertilizer - Mandakini Gogoi, Tethi Biswas, Prasandeep Biswal, Tuhin Saha, Ajoy Modak, Lalit Mohan Gantayet, Rajib Nath, Indranil Mukherjee, Ashoke Ranjan Thakur, Mathumal Sudarshan, Shaon Ray Chaudhuri. Journal of Cleaner Production 293 (2021) 126051

5. Aquaculture effluent treatment with ammonia remover Bacillus Albus (ASSF01) - Mandakini Gogoi, Pinaki Bhattacharya, Sudip Kumar Sen, Indranil Mukherjee, Shashi Bhushan, Shaon Ray Chaudhuri. Journal of Environmental Chemical Engineering. 9(4) 105697, (2021)

6. Characterization of ammonia remover Bacillus Albus (ASSF01) in terms of biofilm forming ability with application in aquaculture effluent treatment – Mandakini Gogoi, Indranil Mukherjee and Shaon Ray Chaudhuri. Environmental Science and Pollution Research. Accepted (2021)

7. Inner Composition Alignment Networks reveal financial impacts of COVID – 19 – Shashankaditya Upadhyay, Indranil Mukherjee and Prasanta K Panigrahi. (communicated) 2021

8. Non-holonomic and quasi-integrable deformations of the AB equation - Kumar Abhinav, Partha Guha and Indranil Mukherjee (communicated) 2021

Book Chapters

1. Self-sustained ramie cultivation: an alternative livelihood option – Shaon Ray Chaudhuri,……….Indranil Mukherjee, Gautam Bose, R.K. Naik – in Bioresource utilization in Therapeutics, Biofuel, Agriculture and Environmental protection: Ed. H.N. Thatoi, S.K. Das and S. Mahapatra –Apple Academic Press (AAP) , Inc. Canada, Taylor & Francis group. (2021)

Doctoral Students

1. Chaitali Chanda - Optimization of wastewater treatment using microbial formulation in biofilm based bioreactor system – Ongoing – Supervisor along with one Joint and one Associate Supervisor

2. Sandeep Dey - Improvement of customer experience in retail banking – Enrolled – Supervisor along with one Co-Supervisor

3. Dipanjan Ray Chaudhuri – A study on the immovable properties acquired by Calcutta University, Jadavpur University, Burdwan University and North Bengal University by way of gift - Applied for enrollment – Supervisor

4. Sujata Gupta – Quality Hospital Services: A comparative study of NABH and other hospitals in West Bengal – Submitted – Supervisor Funded Research Project Serving as Director of the Ministry of Education funded project "Centre of Excellence in Environmental Technology and Management", under the FAST (Frontier Areas of Science and Technology) scheme. A fresh fund of Rs 49,50,000.00 was received for this project in March 2021 and the project extended till September 2021.

Patents

Indian granted patent 351564 dt. 16 th October, 2013 (granted on 13 th November, 2020) Workshop organized Workshop on "Advanced Waste Water Treatment – the Microbial Approach" on February 24 and 25, 2020 with resource persons from IISER Kolkata, Jadavpur University, NCCS, Pune, Thermax India Ltd. And Tripura University.

Resource Person in Short Term Training Program

One of the keynote speakers in the AICTE sponsored STTP organized by MAKAUT on June 6, 2021.

Webinars participated in as resource person / moderator during 2020-21

1. Working through the lockdown
2. Online Content Development - Methods and Practices
3. Entrepreneurship for Students Awareness
4. Tourism & Hospitality: Careers and Opportunities
5. Adopting the online teaching Learning Paradigm
6. Women Entrepreneurship
7. Social Media Management
8. Teachers Day Celebration
9. Career Opportunities in MBA and BBA courses
10. Digital Education – A new frontier

Online Courses undertaken and Certificates earned during 2020-21

1. Business Analytics Specialization - Wharton School, University of Pennsylvania
☐ Customer Analytics
☐ Operations Analytics
☐ People Analytics
☐ Accounting Analytics
☐ Business Analytics Capstone

2. Finance and Quantitative Modeling Specialization, Wharton School, University of Pennsylvania
o Fundamentals of Quantitative Modeling
o Introduction to Spreadsheets and Models
o Financial Acumen for Non-Financial Managers
o Introduction to Corporate Finance

3. Programming for Everybody (Getting started with Python) – University of Michigan

4. Python Data Structures – University of Michigan

5. Practical Time Series Analysis - The State University of New York.

New Courses Designed

Part of the core team that designed the courses for BBA and MBA in Business Analytics. Supervised recasting of the UG courses in the Choice Based Credit System (CBCS) format with emphasis on Outcome Based Education (OBE).

MoU / Collaboration

One of the liaison persons from the University who helped pilot the discussion regarding collaborative programs with the National University of Juridical Sciences (NUJS) which culminated in the signing of the Memorandum of Understanding between MAKAUT, WB and NUJS.

Other Collaborative Activities

Was one of the key members of the Partnership Cell of MAKAUT and the Vice Chairman of the Governing Council of this Cell which introduced several programs at Degree, Diploma and Certificate levels to offer skill based and competency enhancing professional education to improve the employability of the students.
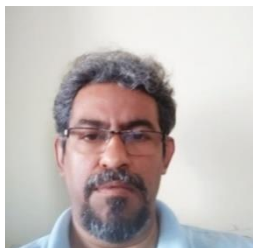
Dr Sujit Mukherjee
Professor & HoD (MBA Studies)

Qualifications: MBA, M.Phil, PhD

Area of Specialisation/Research Interest: Management/Consumer Behaviour & Applied Social Psychology

Seminar/Webinar organized/participated in: Webinars conducted : 25 Webinars attended : 35

Workshop organized/participated in: 01 (O) 01 (P)

Invited Lectures: 02

Research Papers Published: 02

Refresher/Orientation Courses: Completed a 45 hour Certificate course on Digital Marketing from Google

PhD Guided: 02(in process)

Professional Activities: Developed a 21 episode, 6 week long 2 credits MOOC titled "Entrepreneurship Management" on Swayam

Workshops/Conferences/ Publications

1. Presented a Paper titled "Role of Country of Origin Image on Purchase Intention towards Fashion Apparels in India" jointly with Dibyendu Chattaraj at the 2- day International Online Conference on Application of Statistics in Sciences, Social Sciences,

Humanities, Commerce & Management (IOCAS)-2020, organized by K C College, HSNC University, Mumbai on June 29 & 30, 2020.

2. Published a research paper titled "An Analytical Study – How Marketing Strategies of Home Appliances provided a new horizon of economic development in India from 2009 to 2016, jointly with Chinmoy Ghosh, published in Purakala (UGC CARE listed), ISSN : 0971 – 2143, Vol 31, Issue 32, May 2020.

3. Participated in Online Workshop on Structured Equation Modelling (SEM) using AMOS organized by the Department of Statistics, KC College, Mumbai, under the aegis of DBT-STAR College Status Scheme on 24-26 August 2020.

4. Organized a 5-day Online FDP on Advanced Research Techniques under School of Management Sciences, MAKAUT, WB on August 8,9,16, 22 & 23, 2020.

5. Organized & anchored several Webinars (25) on a variety of subjects & topics, details can be seen in the University website.

6. Organized a 5 day webinar series titled "Earning from the Internet"

7. Developed a 21-episode, 6 week long MOOC on Entrepreneurship Management launched for UG students on Swayam portal on 15 February 2021. This was a collaborative project with CEC (MHRD) & EMMRC, St. Xavier's College, Kolkata.

8. Was invited as a Guest Panellist by College Duniya for a panel discussion on the possible impact Higher Education post scrapping of the CBSE board exams (25.6.2021).

9. Was invited as Chief Guest by Techno Engineering College, Banipur for a webinar titled "Prospects of Manufacturing Industries – Post Covid " on 12 June 2020.

Jay Prakash Shaw
Adjunct Professor and Head, Department of Travel and Tourism

Sri Jay Prakash Shaw is Adjunct Professor & HOD, Department of Travel and Tourism,School of Management Sciences, MAKAUT W.B. since July 2019. He is also holding the additional charge of Director, Entrepreneurship Cell and Director, EKTA Incubation Centre of MAKAUT. Prior to his joining MAKAUT he was working for Ministry of Tourism, Government of India and was posted as Deputy Director General/Regional Director at Indian Tourism Office Kolkata.

After completion of his Graduation in 1981 and Post-Graduation in 1983 with History from Jadavpur University, he joined Ministry of Tourism as Tourist Information Officer in January 1984 through Staff Selection Commission. In 2001 he was selected as Director in the Ministry of Tourism through UPSC. He worked in different capacities in the Ministry of Tourism both within India and Overseas. His prominent postings were as Deputy Director General Head Quarters, as Regional Director at India Tourism New Delhi, Chennai and Kolkata. As Director in the Ministry HQ, India Tourism Jaipur, as Assistant Director India Tourism Varanasi and India Tourism Paris (France) from 1992 to 1997 and as Director at India Tourism Johannesburg

(South Africa) from April 2005 to March 2008.During his posting overseas his main role and function involved promoting India as a year round destination amongst the travellers of those nations and trying to attract maximum visitors to India. After his superannuation in November 2018 he joined MAKAUT in July 2019. He carries with him a vast experience of almost 33 years in government sector. He has also academic experience being visiting faculty at institutes of travel tourism and hospitality. He is also a member of the Advisory Committee, Netaji Subhash Open University, Kolkata and Honorary President of Association of Buddhist Tour Operators (ABTO) Rajgir, Bihar

He has travelled to more than 20 countries to represent India in various tourism exhibitions, conferences & seminars. Notable among them are as a delegate at the U N World Tourism Organisation Assembly meeting in Tunis, Tunisia, Tourism Conference of SAARC Nations in Thimpu, Bhutan and led an Indian tourism delegation to Colombo and Kandy Sri Lanka for promotion of India during the Commonwealth Games. He also possesses following is professional qualifications:

1. Certificate in Tourism Marketing Management
2. Certificate in International Marketing
3. Diploma in Export Management
4. Certificate in French Language from Alliance Francaise du Calcutta.

He had also successfully attended the following Trainings & Workshops organized by Government of India:-

1. E-Governance Technology and Management
2. Financial Management
3. Workshop on Results Based Management Framework and RTI for CPIOs.

During the year 2019-20 he attended the following conferences/seminars and delivered lectures as key note speaker.

1. International Buddhist Conference in Lumbini, Nepal ,
2. Travel Tourism Conference in Dhaka, Bangladesh,
3. International Buddhist Conference in Bodhgaya, Bihar,
4. International Conference on Rural Tourism at Visva Bharati, Santiniketan
5. National Conference on Entrepreneurship in Hospitality & Tourism Industry at Bhubaneswar Odisha

He successfully organised the World Tourism Day event on 27[th]Septemeber 2019 on behalf of SOMS, MAKAUT in association with IIHM Kolkata. While on 27[th]Septemebr 2020 he was instrumental in organising an online webinar on theme Tourism & Rural Development on this year's World Tourism Day. He organised & moderated quite a few webinars organised by MAKAUT on Tourism & Hospitality, challenges & Opportunities, Entrepreneurship etc. He was also the key note speaker on this year's World Tourism Day programs at NIPS School of Hotel Management & Gandhi Institute of Management. He is associated with a number of programs and projects of MAKAUT in particular the Heritage Cell, Publicity & Promotion etc.

Subrata Kumar Ray

Adjunct Professor

Prof. Subrata Kumar Ray, LLM, DIRPM, FCS is an Adjunct Professor in the School of Management Sciences. He is a former General Manager and Company Secretary of MSTC Ltd., a Govt. of India company. He has around 38 years of experience in corporate sector in Personnel, legal, commercial, internal audit, company secretarial, CSR and other corporate affairs.

Besides contributing many articles in legal and corporate matters in all India level reputed journals, Mr Ray has addressed various seminars organized by different fora including Institute of Chartered Accountants, Institute of Cost Accountants and Institute of Company Secretaries and is an academic resource person of these three institutes. He has presented papers in few universities and institutions.

He has been visiting faculty in 23 B schools for last 20 years, including IIM Calcutta, IIM Shillong, IIFT, Kolkata. Presently he is visiting faculty of MDI, Murshidabad.

He is past chairman, Institute of Company Secretaries of India, Eastern Region and fellow member, Indian Council of Arbitration, where he is an empaneled arbitrator.

His areas in teaching are Business Laws, Corporate Governance, Human resources, Industrial Relations, Labor Laws, Business Ethics, Corporate Social Responsibility etc.

Dr Debasish Dutta
Assistant Professor

Qualification: PhD.

Experiences: Academic: 7 years 10 months. **Industry** 8 years 9 months.
Current Area of Research: Operational Management and Information Systems.

Research Paper Published (2019-2020):
Approach Towards Problem Solving on Single Machine Scheduling with Unequal Release Dates and Learning Effect. Information Systems and Operational Research, ESCI, SCOPUS cited and ABDC listed.

Invited Talk: 2 (Two), International.

Research Projects: Two MSME Cluster development projects, sponsored by TIFAC, GoI as Principal Investigator.

Consultancy Projects: GRSE CSR Impact Analysis. Co-Project Leader and Lead Analysist.

Debadrita Panda

Assistant Professor & HoD (BBA-Studies)

Debadrita Panda, a research scholar at University of Burdwan (Stood first in RET conducted by BU), having more than 2.5 years of academic experience and 2 years of industry experience. Presently, she is Assistant Professor of Business Analytics and Statistics at School of Management Sciences, MAKAUT (Govt. of WB), India. She has completed her graduation in Computer Science and Engineering from Haldia Institute of Technology and MBA from IISWBM (Gold Medallist) with Business Analytics and System specialization. She had served companies like IMRB and had associated with Brainware University, JIS University, Techno India Main and IISWBM. She has keen interest in quantitative techniques, consumer analytics, neuromarketing and BoP segment.

Research Papers Published: 3 papers (All journals are UGC-CARE enlisted, SCOPUS indexed, two is ESCI indexed journals)
1. Influence of celebrities on BoP to make packaging influenced purchase decision (IJMP, https://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijmp)
2. Prediction of consumer preference for the bottom of the pyramid using EEG-based deep model. https://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijcse
3. Packaging-Influenced-Purchase Decision Segment the Bottom of the Pyramid Consumer Marketplace? Evidence from West Bengal, India. (In production, Asia-Pacific Management Review, Elsevier, ABDC ranked journal).

Book Chapter:
Panda, D., Chakladar, D. D., & Dasgupta, T. (2019). Multimodal system for emotion recognition using EEG and customer review. In Proceedings of the Global AI Congress (pp. 399-410).- available online from 2020.

Refresher/Orientation Courses:
Participated and completed successfully in three FDP. One is in Data Science domain another is in tools in writing research project.
☐ One -week FDP on IPR , organized by Techno India Main, Saltlake.
☐ 10-days FDP program "Data Science for All" by NIT, Warangal, NIT Surathkal.
☐ 10-days FDP program –" Digital Tools for Writing, Authoring and reviewing manuscripts" Jointly organized by EICT Academies- MNIT Jaipur, NIT Patna & joined by IIT Guwahati.

Courses designed: BBA, BBA-BA, BBA-DM as per CBCS structure.

Professional Activities: Departmental administrative work, AQAR Preparations, Documentation for NAAC Criteria 2.

Any other information: Actively engaged in research, publication and self-improvement related activities like learning new tools, techniques and so on.

Surajit Malakar

Assistant Professor

Passed B.com from University of Calcutta, completed Inter from Institute of Cost Accountants of India and Masters in Business Administration (MBA) with specialization in Finance and Marketing from University of Kalyani. Around 20 years of working experience in industry as well as in teaching in various educational institutions and universities in India and abroad in the areas of Finance, Accounts, Internal Audit, Management, Portfolio Management and Consulting. Undertook research activities in the areas of Finance and Audit which got published in different Journals.

Subrata Ghosh

Assistant Professor

Completed PhD Research Work and submitted Thesis at Assam University, Silchar (A Central University).

Completed 2 short term courses-
- ❏ "Communication Strategies for a Virtual Age" from University of Toronto, through 'Coursera'

- ❏ "Creative Thinking: Techniques and Tools for Success" from Imperial College London, through 'Coursera'

Research Paper Presented-
- ❏ Paper titled "Agility: A Key Component to Combat Uncertainty during the Pandemic" in the "International Conference on "Rethinking Business: Designing Strategies in the Age of Disruptions" held on 19/12/ 2020 organized by 'Mittal School of Business', Lovely Professional University, Punjab.

Research Publication-

- ❑ Subrata Ghosh & Arup Barman (2021), "Agility As The Crucial Attribute In Combating The Uncertainty: The Corporate Evidences During Pandemic." 'South Asian Journal, Sombodhi' (UGC Care Listed), Vol-44, No.-1, (IV) January-March (2021), ISSN: 2249-6661

- ❑ Subrata Ghosh & Arup Barman(2021), "Agility In Business Practice For Sustainability-examining Components Commonality.", The George Washington International Law Review(UGC Care Listed) (ISSN- 1534-9977, E-ISSN- 0748-4305), Vol.- 07 Issue -01 April-June 2021

Sarani Bhaumik

Assistant Professor, Travel & Tourism

Qualifications : MA, MBA

Seminar/Webinar organized/participated in 2020-21:

Seminar/Webinar organized/participated in 2020-21:

- Participated in 5th Eastern Regional Conference by ISTD Kolkata on 10th -11th January – 2020: Topic: Empowering the workforce in the digital transformation Era.

- Workshop on "Knowledge Access Through J- Gate and Open resources in Management" organized by Centre for Knowledge Resources of R V Institute of Management, Bangalore on 11th September, 2020.

- 5-Day Faculty Development Programme on Advanced Research Techniques; MAKAUT; WB, on 8, 9, 16, 22 and 23 August, 2020.

- FDP on 'Building Research Capabilities' organized by Centre of Research and Consultancy of RV Institute of Management, Bangalore; from 19th July to 25th July, 2020.

- FDP on 'Application of Business Analytics in the areas of Management' organized by R V Institute of Management, Bangalore; from 22nd to 26th June 2020.

- 7 Days FDP on Contemporary Research Practices in Social Sciences, Amity University; Uttar Pradesh; 30th May to 05th June 2020.

- FDP on 'Future of Learning: COVID or No COVID' organized by R V Institute of Management, Bangalore, on May 27th to May 29th, 2020.

- Faculty Development Programme on "Implications of COVID-19 on world economy" organized by R V Institute of Management, Bangalore, from 20th May to 22nd May 2020.

- Participated in 5th Eastern Regional Conference by ISTD Kolkata on 10th -11th January – 2020:
  Topic: Empowering the workforce in the digital transformation Era.

- Participated as an attendee in IFTDO (International Federation of Training and Development Organizations) Global Virtual Conference, 2020; "Reshaping the future of HRD in a Fast-Changing World" on 25th November, 2020.

- Two-Week Online FDP on "Advanced Techniques and Tools in Social Science Research.", organized by Aliah University, Kolkata & collaboration with SPSS, from 24th November to 7th December 2020.

- Participated in the Faculty Development Programme (Webinar) titled, "Intellectual Property Rights" organized by Centre for Management Studies; Presidency College, Bengaluru in association with Canara Bank School of Management Studies Bengaluru City University conducted on 18th December 2020.

- Participated & presented a paper entitled "Identifying Destination Choice-Criteria in Pandemic Times: A Case for Senior Travellers with Diagnosed Co-Morbidity" in the 4th International Conference on Management and Business Practices (ICMBP)-2021, Aliah University, Department of Management & Business Administration, on 8th & 9th February, 2021.
  Topic: "Embracing the New Normal with Innovative Management Practices"

1) Participated in the Faculty Development Programme (Webinar) titled, "Application od Statistical Tools (SPSS & AMOS) in the field of Marketing" organized by Centre for Management Studies; Presidency College, Bengaluru on 19th February, 2021.

2) 5 days FDP on 'Learning Management from Gitopanishads ' organized by R V Institute of Management, Bangalore; from 22nd to 26th February 2021.

3) Participated in 23rd NHRDN National Conference hosted by the Delhi & NCR Chapter on 26th -27th February – 2021:
  Topic: "Transforming HR Agility, resilience, Digital: Accelerating Revival of Businesses".

- Participated & presented a paper entitled "New Normal Academia: Experiences and Practices: A Case let: MAKAUT, WB" in the one day HR International conference(Virtual) organized by Department of Human Resource Management, on 9th April 2021, Ramaiah Institute of Management, Bangalore.

Topic: "WORKFORCE MANAGEMENT TRENDS"

- Participated in the workshop hosted by School of Management & Commerce, Brainware University(Business Incubation Centre) & Institution's Innovation Council; Ministry of HRD Initiative from 03/06/2021 – 07/06/2021.
  Topic: "Digital Entrepreneurship: Future of Biz - A New Normal!"

Workshop organized/participated in 2020-21: N/A

Invited Lectures in 2020-21: N/A

Research Papers Published: Currently 2 publications are under process.

Books/Book Chapter Published: N/A

Research Projects: N/A

MoU/Collaboration: N/A

Refresher/Orientation Courses: N/A

PhD Guided: N/A

Courses designed: BBA TTM (CBCS)

Patents/IPR Generated: N/A

Consultancy Extended: N/A

Professional Activities: Associate with DTORR as a resource person & project guide

Any other information: Life Member of NHRDN, RTOSI, AIMA, ISTD & Associate member of PRSI.

Sayantani Ray
Assistant Professor, Hospital Administration

Qualifications : MHA (Masters in Hospital Management)

Seminar/Webinar Organized/ Participated in 2020 -21 : Organised A Webinar Careers And Prospects Of Hospital Management.

Research Paper Published : Communicated one paper in UGC CARE JOURNAL named Analyzing gap of unexplored dimension of service quality : Exploratory study on life insurance companies in west Bengal .

Refresher / Orientation Courses : 5-Day Faculty Development Programme on Advanced Research Techniques; MAKAUT; WB, on 8, 9, 16, 22 and 23 August, 2020.

Pursuing course from edX

(Course Name - Improving Global Health: Focusing on quality from HarvardX)

Biswanath Saha

Assistant Professor, Hospital Management

Seminar/Webinar organized/participated in 2020-21: Digital eye care in COVID pandemic - 25th July, 2020, Digital healthcare in the post pandemic India-19th Feb, 2021, ensuring zero compromise of Healthcare system 25th Feb, 2021.

Professional Activities: Coordinator of MBA(Hospital Administration) Question paper setting, examination invigilator.

School of Energy and Environmental Sciences

Prof. Tapan Kumar Parya

Director

Introduction : In pursuit of assimilating comprehensive knowledge base and booming advance research works leading to centre of excellence in the emerging field of sustainable renewable energy resources vis-à-vis green environment, MAKAUT has set up the school of energy and environmental sciences under its umbrella from 2019.

School of Energy and Environmental Sciences consists of Department of Renewable Energy and Department of Environmental Sciences.

Department of Renewable Energy offers M.Tech course in Renewable Energy.

Department of Environmental Sciences will offer B.Sc and M.Sc program in Environmental Science.

Department of Renewable Energy

To combat alarming depletion of fossil fuels and enormous pollution generated during energy harvesting from these fuels befittingly, the world community has been compelled towards extensive exploration and efficient harnessing of clean, sustainable renewable energy resources. The vast area of renewable energy is becoming smarter and integrated very fast which eventually powering to clean and green energy revolution of the future. To cater the innovative field, huge number of specialized technologists and engineers are needed globally for achieving proper development of renewable energy sector. In view of above, MAKAUT, WB has taken immediate step to establish the department of renewable energy under the school of energy and environmental sciences in main campus of the University at Haringhata.

Vision:

To build a world class prime knowledge and research centre/hub in the field of renewable energy and contribute to the society through advanced educational programs, R & D activities, execution of innovative ideas and generation of highly skilled technologists and engineers in the emerging field of new & renewable energy.

Mission:

- To evolve a top-quality education and updated technical skill system attenuated to the changing needs of renewable energy sector.

- To endow students and researchers with modern concepts & adequate knowledge in order to equip them with industry ready with technical expertise.
- To inspire students and research scholars with creative ideas and aptitude for conducting industrial oriented research and development works.
- To promote entrepreneurial, managerial and leadership quality among the students.
- To strengthen academic, industrial, and social interaction through continuous active collaborations.

Thrust areas of the department:
- Efficient Renewable Energy Harvesting.
- Comprehensive Energy Management and Audit.
- Development of Newer & Smart Materials for New & Renewable Energy sector.
- Renewable Energy based Devices & Appliances.
- Software based energy informatics & modelling.

Academic Programs:

On-going programs:
- 2 year 4 semester M.Tech course in Renewable Energy.
  Intake Capacity: 30
  Admission: Through PGET conducted by MAKAUT,WB.
  Eligibility: B.Tech/B.E in any discipline of Engineering and Technology and M.Sc in any branch of Science (Except bio-sciences)

Academic activities:
- M.Tech 1st semester (Session 2020-21) classes were started in the month of November.
- Both theoretical and practical classes were conducted via online mode.
- Virtual labs by MHRD were used to conduct the practical experiments virtually.
- BOS meeting was held on 18.12.2020 to finalize the vision & mission of the department.
- The entire syllabus of all papers (both theoretical and practical) in 1st semester has been completed successfully.
- Department of Renewable Energy have conducted several internal assessments and mock tests of all the paper included in the M.Tech 2nd semester via Google forms & CANVAS.
- M.Tech 1st Semester exam was held between March 18 to April 8, 2021.
- Department of Renewable Energy have emphasised audit courses on different online platforms for the M.Tech students.
- M.Tech 2nd Semester (Session 2020-21) classes were started in the month of April.
- Departmental faculties monitored the final year research project on weekly basis via virtual meetings.

- Department of Renewable Energy always encouraging students to learn different design softwares on renewable energy like Pvsyst, Homer, System Advisory Model, AutoCaD etc.
- Students of M.Tech in Renewable Energy are involved in several online courses on IOT, Artificial Intelligence and Entrepreneurship development apart from their semester subjects.
- Faculties are constantly interacting and monitoring the students online learning progress as well as continuously guiding for physiological and moral boosting.
- BOS meeting was held on 28.06.2021 to finalize the syllabuses of three certificate courses.

Student Activity:
- Students of M.Tech in Renewable Energy have pursued 1st & 2nd semester practical classes via Virtual Labs.

- Students of M.Tech in Renewable Energy have completed several online courses on IOT, Artificial Intelligence and Entrepreneurship development apart from their semester subjects.

- Students of M.Tech in Renewable Energy have attended National Seminar, Workshops organised by different institutions.

- Students of M.Tech in Renewable Energy have taken part as Presenter in Online Student Symposium organised by the department on 5th June 2021 on the occasion of World Environment Day.

- Final semester students have prepared three entrepreneurship/innovative projects and submitted to the University for funding.

Collaborations:
- Formal Collaboration with Ramkrishna Mission Vidyamandira has been completed.
- Academic & internship collaboration with CU.JU, IIEST-Shibpur,IIT Bombay, CSIR-CGCRI, M/S Geetanjali Solar & M/S Aditya Birla Group of Insulators.

Examination Results:
1. M.Tech 1st Year 2nd semester (Session 2019-20) examination was published in December 2020.
2. M.Tech 1st year 1st Semester (Session 2020-21) examination was published in June 2021.
3. M.Tech 2nd year 3rd Semester (Session 2020-21) examination was published in June 2021.

- Performance of the students in the examinations are very much satisfactory & impressive.

Futuristic plans:

Proposed Up-coming programs:
- 3 months Certificate Course in Energy Management and Audit.
- 3 months Certificate Course in Solar Energy and Sustainability.
- 3 months Certificate Course in Energy Informatics.
- PhD Program in Renewable Energy from the session 2021-22.

**All the proposed certificate courses will be conducted via online mode.

Successful Online Webinar organised:

1. Online Student Symposium "Renewable Energy Colloquium - II" on the theme "NEW HORIZONS OF RENEWABLE ENERGY TECHNOLOGY FOR CLEAN AND GREEN ENVIRONMENT" on June 05, 2021, Time- 10:00 AM IST.

2. Title : Development of new generation ceramic materials, Date of webinar: 30th January, 2021, Time: 4.00 pm to 9.30 pm.

Promotional Activities:

- A Departmental page is created in social media platform for continuous update on academic activities & admission related queries.
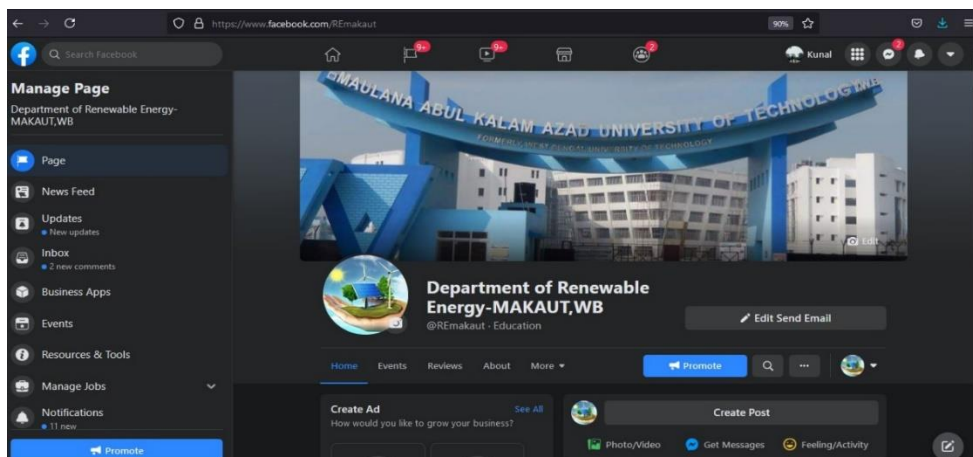
- Departmental webpage was launched on 5th June 2021.

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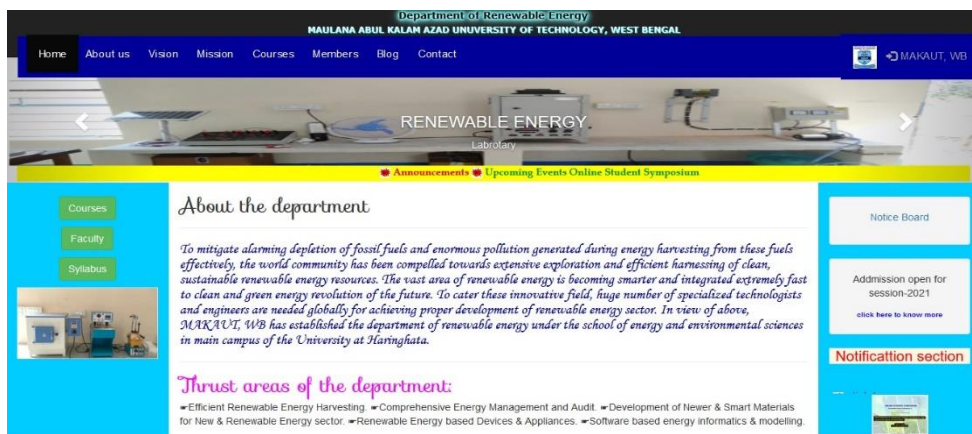
- Official blog page @REnergy,MAKAUT,WB has been created to publish and discuss different policies & regulation, research topics and industrial developments related to renewable energy.
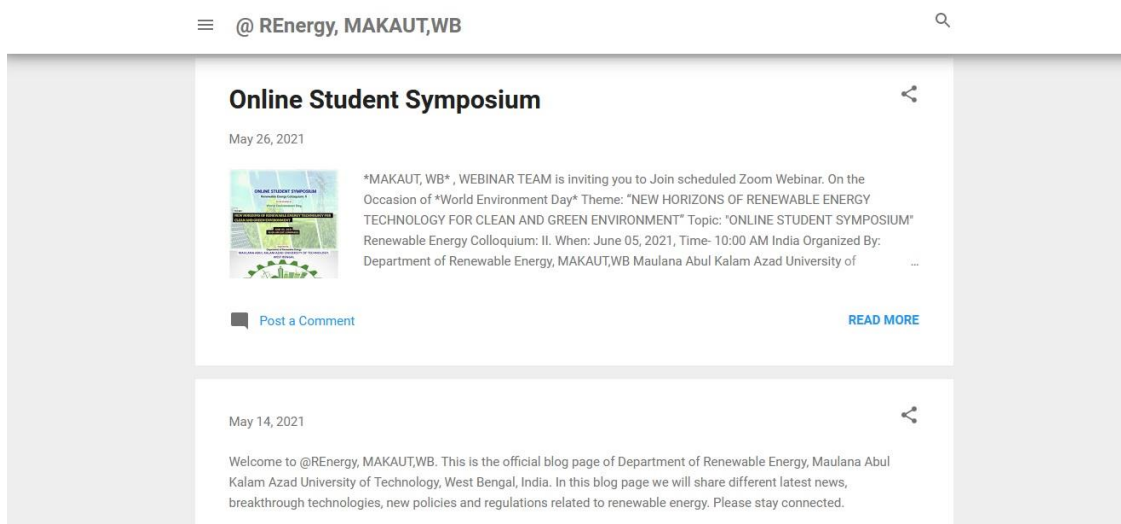
List of Faculties:

1. Prof. Tapan Kumar Parya- Head, Adjunct Professor
2. Mr. Kunal Chowdhury- Assistant Professor (On Contract)
3. Dr. Rajendra Nath Basu-Guest Faculty(CSIR-CGCRI)
4. Dr. Ratan Mandal- Guest Faculty(Jadavpur University)
5. Dr. Ashok Mondal-Guest Faculty (RCCIIT)
6. Dr.Uttam Kumar Ghorai-Guest Faculty (R.K.Mission Vidyamandira)
7. Dr. Jayanta Mukhopadhyay-Guest Faculty (CSIR-CGCRI)
8. Dr. Rajkumar Dey- Guest Faculty (Jadavpur University)
9. Dr.Pijush Basak- Guest Faculty (Dream Institute of Technology)
10. Mr. Anjan Kr. Bhattyacharya-Guest Faculty (Ex. IOCL)
11. Prof. Ananta Kumar Das-Guest Faculty (MAKAUT)
12. Dr. Anirban Roy -Guest Faculty (MAKAUT)

Faculty Profile

Prof. Tapan Kumar Parya

Adjunct Professor

Professor Tapan Kumar Parya is currently the Director of School of Energy and Environmental Sciences. Prof. T. K. Parya received his M.Tech, PhD (Tech) in Chemical Engineering and Chemical Technology from University of Calcutta. Prof. Parya successfully served different chemical and allied industries, directorate of small scale industries in senior position for 9 years. He was then engaged as faculty member in the Department of Chemical Technology, University of Calcutta since 1989 for 29 years. He is a well known academician in the field of high tech ceramics, nano-materials, suspension rheology and polymers. He had guided 17 research scholars for their PhD degrees. A few research students are still working under his supervision. He had more than 100 publications in the well acclaimed national and international journals. He is honoured as fellow in number of scientific and technological societies. He is the editorial board member and reviewer in some reputed journals. He has long been contributing as expert, advisor and visiting faculty in various academic, research institutes and government bodies.

Publications in 2021-21:

- A.K.Kaviraj, S.Saha, A.Chakraborty, T.K.Parya, S.K.Das, Differences in phase, microstructural and electrical characteristics of quartz substituted Alumina Porcelain, J. Aus. Ceram. Soc. 56(3), 2020.

- P.K.Halder, S.Mukhopadyay and T.K.Parya; "Effect on Zr4+ doping on the microstructure and densification behaviour of ZrAl2O4, Spinel", Interceram- International Ceramic Review, Germany, Vol 69(6), 2020, 44-49.

Mr. Kunal Chowdhury

Assistant Professor (On Contract)

Kunal Chowdhury has completed his B.Tech degree in Electrical Engineering from Netaji Subhash Engineering College affiliated to Maulana Abul Kalam Azad University of Technology, West Bengal and M.Tech degree in Energy Science and Technology from Jadavpur University. He also worked as a Research Fellow in a MNRE funded project for high efficiency solar cell fabrication. He joined the University as a Faculty in the Department of Renewable Energy under School of Energy and Environmental Sciences in 2019.

Research Interests:
- Solar Cell Fabrication
- Solar PV System Design
- Power System
- Energy Management

Conference Paper Presented in 2020-21:
- Advancement of Schottky barrier solar cells: a review by K.Chowdhury, R.Mandal at International Conference on Contemporary Issues in Computing at IETE, Kolkata.
- "ALD Grown Al_2O_3 layer as interfacial layer in ITO based SIS Solar Cells", IRRET 2021.

Book Chapter/Conference proceedings published in 2020-21:

- K.Chowdhury, R.Mandal, Agrivoltaic: A New Approach of Sustainable Development: Advances in Water Resources Management for Sustainable Use, Springer, June 2021.
- K.Chowdhury, U.Gangopadhyay,R.Mandal, " ALD Grown Al2O3 as interfacial layer for ITO based SIS solar cells": Journal of Nano and Electronic Physics, Vol 13, Issue 4, June 2021
- K.Chowdhury, R.Mandal, Advancement of Schottky Barrier Solar Cells: A Review. Topics in Intelligent Computing and Industry Design, 2(1): 93-98

Courses or FDPs Completed/Enrolled in 2020-21:
- FDP on "Patenting Technology and Process Innovations related to Renewable Energy" at Jadavpur University.
- FDP on VLSI and Nanotechnology in Energy, Environment, and Neuromorphic Computation offered by IIT Indore.
- Electric Vehicle Charging Station offered by UDEMY.

Department of Environmental Science
Head of the Department: Dr. Chabita Saha

Introduction of the Department/Centre: 2019

List of Faculty:

Sl No	Name of the Faculty Member	Present Designation	Area of Specialisation/Research Interest
1	Dr. Chabita Saha	Associate Professor	Nanotechnology and Biophysical chemistry
2	Prof. Ananta Das	Professor	Waste Management

Futuristic Plans: New Proposed Programme in 2021-22:

Sl. No.	Course	UG/PG/certificate
1	Environmental Legislation	PG Diploma
2.	Green Audit and green energy	Certificate
3.	Environmental Analytics	PG Diploma

Workshop/Seminar/Webinar/Other events in 2020-21: 1) Nanoparticles and Biomarkers in Disease Treatment and Management. 2) Environmental justice – is it a doomed Indian fantasy? 3) World environment day – 2021

Faculty Profile

Dr. Chabita Saha

HoD Environmental Science

Qualifications : Phd

Seminar/Webinar organized/participated in 2020-21:

Webinar organized : *1)* Nanoparticles and Biomarkers in Disease Treatment and Management *2)* Environmental justice – is it a doomed Indian fantasy? *3)* World environment day - 2021

Participated Webinars

1. Online Teaching, 7/6/20
2. Resurrecting the Emerging contours of Public Health in Anthropocene: The urgency of digital health revolution Series II-4/7/20
3. Material Informatics-Emerging paradigm of material design -16/7/20
4. Transforming Science Education and Research through computation: Intensive tools of leaning-20/7/20
5. Smart nanomaterials for applications in applied sciences-19/8/20
6. Modern Techniques of Microbiological Analysis of Foods-1/120/20
7. Panelist for sorrow-depression- joy session viii- 19/6/21
8. ICC EDTECH Summit-The Education Technology Trends in India-Vision 2025-26/6/21
9. Online Teaching and learning with Prof. Peter Jones-28/6/21
10. Training on faculty assessment program-27/6/21

Workshop organized/participated in 2020-21: 5-Day Faculty Development Programme on Advanced Research Techniques - 8 ,9 ,16 ,22 and 23 August, 2020, MAKAUT

Invited Lectures in 2020-21: "Scope of virtual labs in UG Physics and Chemistry   Teaching, 30.6.20" invited by SarojiniNaidu College, Kolkata

Research Papers Published: Hydrophobic quercetin encapsulated hemoglobin nanoparticles: formulation and spectroscopic characterization, Debashis Majumder,Shaon Roychoudhry,Somashree Kundu,Subrata Kumar Dey & Chabita Saha* , Received 14 Aug 2020, Accepted 24 May 2021, Published online: 07 Jun 2021, https://doi.org/10.1080/07391102.2021.1936181

Research Projects: Radiation induced protein nanoparticles for drug delivery and imaging in cancer treatment UGC DAE-KCCRS/19/RC05/0980

MoU/Collaboration: 1 under process

PhD Guided:

Thesis Submitted by Mr. Debashis Majumder : Title of the thesis: Study on Interaction of Flavonoids with Major Biomacromolecules and their Encapsulation in Nanoform to Target Cancer Cells

Thesis submitted by Ms. Asmita Das: Title of the thesis: Investigation of interaction of polyphenols with biomacromolecule and their anticancer and antimicrobial liposomal formulation

Pursuing Ph. D Research work: Ms. Ishaleena Chowdhury

Courses designed: Two courses under construction :   (1)PG Diploma in Environmental Legislation and (2) Environmental Analytics

Professional Activities: External examiner for PG course in Applied Chemistry,Contributing to NAAC re-accreditation, NSS, drafting Proposals for MoU

Any other information: Courses completed

1. Introduction to sustainability from Coursera-22/8/20
2. Nanotechnology: A makers course from Coursera -25/4/20
3. Intellectual property law and policy-part 1- from edX- 20/2/21
4. Understanding Research Methods from Coursera-20/3/21

Dr. Ananta Kumar Das

Professor

Qualifications: Phd (CU)

Seminar/Webinar organized/participated in 2020-21:

1. Webinar on "Development of New Generation Ceramic Materials", on 30th January 2021
2. Webinar series on "Resurrecting the Emerging contours of Public Health in Anthropocene: The urgency of Digital Health Revolution",27th June2020, 4th July, 31st July2020
3. Webinar series on the theme "Environmental Justice-Is it a doomed Indian Fantasy?"

Workshop organized/participated in 2020-21:

1. 'Recent advances in Environmental Biotechnology, Continuing Education Programme (CEP), IITKgp, under TEQIP-III, from 05.10.2020-09.10.2020.
2. 5-Day Faculty Development Programme on Advanced Research Techniques " on 8 ,9 ,16 ,22 and 23 August, 2020, MAKAUT.
3. 15 days Online training on 'Water Audit and Conservation in Industries', organized by Centre for Science & Environment' from 1st **March-14th March2021.**

4   Workshop on "Advances in Waste Water Treatment Technologies-Challenges and Opportunities" organized on 14th August 2020.

Invited Lectures in 2020-21:
1   Standard Operating Philosophy in Detergent Manufacturing Plant' on 19.12.2020, OPCPI2020, Jointly HIT, Haldia & IIChE.
2   International Conference on COVID-19 Pandemic & its Impact on Environment organized jointly by MAKAUT & GMIT on May24 ,2021.
3   Online student symposium: Renewable Energy Colloquium: II on 'New Horizons of Renewable Energy Technology for Clean and Green Environment' held on 5th June2021.
4   iv. Live webinar on the topic "Technical education enables the skills and creates new careers" organized jointly GIMT & MAKAUT on 12th June 20121.

Research Papers Published:
1. Extensive analyses of mass transfer, kinetics, and toxicity for hazardous acid yellow 17 dye removal using activated carbon prepared from waste biomass of Solanum melongena', Biomass Conversion and Biorefinery,2nd January2021, Springer, https://portal.issn.org/resource/ISSN/2190-6823 Impact Factor : 2.602 (as Co-author).

Books Published:
1. "Industrial Maintenance Process (Mechanical Maintenance) Vol-I. March2020.
2. "Industrial Maintenance Process (Electrical and C&I) Vol-II, August2020
Research Projects: Guiding research projects of   2 students of Renewable Energy dept., MAKAUT.
MoU/Collaboration: NA
Refresher/Orientation Courses: Involved in orientation programme for the 1st year students of Dept. of Renewable Energy 2020-21.
PhD Guided: Guiding two PhD Scholars at NIT Durgapur, India. One is in pre-submission stage.

Courses designed
1.   UG courses of Chemical Engineering in CBCS format
2.   Certificate course in Energy Management & Audit

Consultancy Extended: Consulting on manufacturing processes & technologies of Fly ash bricks and other products
Professional Activities:
1. Online Summer Internship Training (OSIP2020)
2. Online Internship Program (OIP-2021) 1st Batch
3. Online Internship Program (OIP-2021) 2nd Batch to the students of the Indian Institute of Chemical Engineers (IIChE).

School of Biological Sciences

Prof. Raja Banerjee

Director

Introduction: School of Biological Sciences at Maulana Abul Kalam Azad University of Technology, WB formerly known as West Bengal University of Technology (WBUT) came into existence in 2003 with the Dept. of Biotechnology and expanded with Dept. of Bioinformatics in 2006. The main aim of the school is to promote Biology Teaching to emphasize the grooming of scientists and technologists. Towards this two nationally recognized MTech courses (Biotechnology and Bioinformatics) along with several MSc and BSc courses are being offered by the two departments. The structure and programs of all the Post-Graduate study and research is compact and responsive to global changes in technology. The School not only helps in promotion of the different biological courses by attracting good students who are well placed in academics and industries, but also create a good opportunity for pursuing research *in vivo* along with *in silico* in conjunction with *in vitro* experiments keeping pace with the upcoming global trends in modern biological research. As an outcome every year several research articles are published in the reputed scientific journals with high impact factor which helps to enrich the scientific community. Moreover, organizing national level hands-on workshops and seminars on different aspects of upcoming Biological Sciences, at regular intervals, has proven beneficial for the scientists, researchers, and the faculty members of the affiliated colleges to build a strong base in subjects through interaction with eminent professors and scientists in the relevant field across the country.

The Administrative Structure of the School of Biological Sciences:

Director: Prof. Raja Banerjee

HoD (Biotechnology): Dr. Jaya Bandyopadhyay;   **HoD (Bioinformatics):** Dr. Smarajit Das

Under Corona pandemic the motto of the school is to Spread of academics through keeping physical distance but maintain social relation under stress-less and non-mentally challenged condition.

Focus of the School of Biological Sciences:

➢ To serve the nation for its better development through teaching and research in Biological Sciences,

➢ To meet up the need of today's scientific community and technology areas of topical importance, industries and research,

➢ To provide professional development to students in various fields of Biological Science with opportunities for teaching, research and internships in laboratories, centers or companies worldwide,

➢ To develop a research-based educational hub in the Border Region for training biologists with an interdisciplinary curriculum in pace with industrial and academic research.

Department of Biotechnology
Head of the Department: Dr. Jaya Bandyopadhyay

Introduction of the Department: 2002

Courses Offered:

Sl no	Course offered	AICTE / UGC	Duration	Intake	Eligibility	Enrolment Methods
1	M.Tech. in Biotechnology	AICTE	2 years	30	B.Tech/ B.Pharm./M.Sc in Biotechnology or Allied Subjects	GATB (DBT) / PGET
2	M.Sc. in Molecular Biology	UGC	2 years	30	B.Sc in Life Sciences or Allied Subjects	CET
3	M.Sc. in Microbiology	UGC	2 years	60	B.Sc in Life Sciences or Allied Subjects	CET
4	M.Sc. in Genetics	UGC	2 years	30	B.Sc in Life Sciences or Allied Subjects	CET
5	M.Sc. in Biotechnology	UGC	2 years	60	B.Sc in Life Sciences or Allied	CET
6	B.Sc. in Biotechnology	UGC	3 years	60	Class XII Science	CET

List of Faculty:

Sl No	Name of the Faculty Member	Present Designation	Area of Specialisation/ Research Interest
1	Prof. Raja Banerjee	Professor, Director	Structural Biology & Proteomics
2	Prof. Arup Mukherjee	Professor, Adjunct	Pharmaceutical Chemistry
3	Dr. Jaya Bandyopadhyay	Associate Professor, Head	Molecular Cell Biology

4	Dr. Rina Rani Ray	Associate Professor	Microbiology
5	Dr. Ranjita Biswas	Associate Professor	Microbial Bioprocess Technology & Metabolic Engineering
6	Dr. Tufan Naiya	Assistant Professor	Human Genetics
7	Dr. Smarajit Das	Assistant Professor	Bioinformatics & Big Data Analysis
8	Dr. Debdut Naskar	Assistant Professor	Immunology
9	Dr. Suryyani Deb	Assistant Professor	Clinical and Translational Bionanotechnology
10	Ms. Sayantani Majumder	Assistant Professor	Biotechnology
11	Dr. Bani Kumar Pathak	Assistant Professor	Microbiology, Biotechnology
12	Dr. Arnab Kumar Ghosh	Assistant Professor	Cell Biology, Enzymology, Antioxidant and Medicinal Chemistry, Molecular Biology
13	Dr. Milon Banik	Assistant Professor	Molecular Biology, Nanobiotechnology, Genetics

Number of Students placed in 2020-21: 8 (Eight)

Number of successful candidates in NET/GATE (2020-21): 10 (Ten)

Students undergone for higher studies: 2 (Two)

Field Projects/Internship undertaken by the students: All students undertake laboratory based final year projects (2018-2020 batch and 2019-2021 batch).

Linkage with Institution/Industries: Faculties of Biotechnology and other in-house departments of MAKAUT, WB and delegates from Islamic University of Science & Technology (IUST), Jammu and Kashmir paid a visit to the facilities at the Parle G Plant at Dhulagarh, Howrah, West Bengal on 17th March, 2021, under the aegis of TEQIP III Programme.

Research Scholars awarded PhD during 2020-21:
    1. Kunal Biswas, Awarded May 31, 2021
    2. Swati Sinha, Awarded June 04, 2021

Details of Support Staff:
1. Mrs. Anima Halder, Office Assistant, Dept. of Biotechnology
2. Ms. Priyanka Ghosh, Data Entry Operator, Dept. of Biotechnology
3. Mr. Suman Das, Group D Staff, Dept. of Biotechnology

Students from outside of the country/state:
1. Sudipta Das (2019-20): Bangladesh, M.Sc. in Biotechnology
2. Latifat Toyin Munirudeen (2020-21): Nigeria, M.Sc. in Molecular Biology
3. Devjanee Bhowmik (2020-21): Bangladesh, M.Sc. in Genetics

Whether any examination reform has been implemented during the year: As per University directives and implemented for all: Exam being conducted through the ERP (fully online).

Workshop/Seminar/Webinar/Other events in 2021-22: 5-Day FDP on Applications of CRISPR-Cas Gene Editing Tool under AICTE Training and Learning (ATAL) Academy during 10th - 14th January, 2022, Coordinator, Dr. Jaya Bandyopadhyay

Faculty Profile

Rd. Raja Banerjee

Professor

Qualification: PhD from Jadavpur University (Bose Institute)

Research Area: Structural Biology

Expertise: Conformational aspect of Peptides and design of peptide-based therapeutics Molecular Spectroscopy (2D NMR, CD, FTIR) and Proteomics (MSn)

Dr. Raja Banerjee, an organic chemist by training, has been working for ~25 years in the area of structural biology towards understanding the sequence-structure-function relationship of proteins and their relevance. With the combined expertise of experimentation (using complementary spectroscopic tools) and computation directed towards answering specific biological questions of interest, his work includes design and characterization of peptides for assessing the 'protein engineering' concepts, and the 'protein folding' principles. The concepts and observations acquired in his lab have been extended through development of new ideas

for structure, function, and interaction study with an effort to understand how local motifs (especially 'anion binding') contribute to the global function of protein utilizing non-covalent interactions. The central theme of his research expertise is designing therapeutic leads for diseases usually caused by protein folding/misfolding using the structure-based drug design strategy utilizing peptide-based motifs.

Dr. Banerjee acted as Visiting Professor in several reputed Institutes within and outside the country (viz. University of Padova, Italy; University of Pune; IBSD, Manipur) and Visiting Scientists in several Premier Research Institutes (viz. Visiting Fellow of JNCASR, Bangalore, IISc, Bangalore, TIFR, Bangalore). He chaired the academic sessions in several international conference and delivered invited lectures in several international, national Conference/Seminar/Workshops within and outside the country. He has published number of research articles in reputed international journals with high impact factor.

No. of Students PhD awarded 2020-21 : 2

Highlights of Current Research:

- Study of 'anion recognition' short peptide motifs: an attempt towards arsenic removal
- Characterization of structural motifs for understanding molecular determinants of amyloid plaques
- Characterization of structural aspect of melanin
- MS^n technique for de novo sequencing of proteins/natural peptides
- Effect of mutation in protein sequences towards formation of oral and breast cancer

Dr. Arup Mukherjee
Adjunct Faculty

Qualification: PhD, FRCS

Seminar/Webinar organized/participated in 2020-21: 06

Workshop organized/participated in 2020-21: 02

Invited Lectures in 2020-21: 02

Research Papers Published: 04

PhD Guided: 01

Courses designed: 02

Professional Activities: AICTE expert, PMRF evaluator, Member BIS-FAD 8

Dr. Jaya Bandyopadhyay
Associate Professor & HoD

Qualification: PhD, Post Doctoral training from South Korea (CNU&GIST)

Participated in:
1. 5-Day Faculty Development Programme on Advanced Research Techniques, August 8, 2020-Aug 23, 2020
2. Reimagining Pharma Manufacturing in the Post Covid World (Webinar), August 15, 2020
3. One-week workshop on Robotics, Aug 29, 2020- September 02, 2020
4. Bioinformatics and It's Recent Application, September 10, 2020- September 11, 2020

Organized:
1. Rewriting the code of Life: November 27, 2020 (Webinar Series)
2. Three pioneer Women Scientists of India: December 04, 2020 (Webinar Series)
3. Understanding the Mechanism of Antibiotics Resistance: December 04, 2020 (Webinar Series)
4. Nurturing Creativity to Embrace Uncertainty: December 07, 2020 (Webinar Series)
5. Academia- Industry Interface: December 9, 2020 (Webinar Series)

Research Papers Published:
1. Swati Sinha, Tanaya Paul, Sudhanshu Mishra, Siddharth Shaw, Kunal Biswas, Debashis De, Angsuman Sarkar & **Jaya Bandyopadhyay**. 2021. In Vivo Biointeraction and Alleviation of Toxicity of MWCNTs upon Functionalization with ssDNA in a *Caenorhabditis elegans* Model. **Journal of Electronic Materials.** (DOI 10.1007/s11664-021-09006-3). **(I.F. 1.938)**
2. Sandipan Chakraborty, Jyotirmoy Rakshit, **Jaya Bandyopadhyay**, and Soumalee Basu. 2021. Multi-target inhibition ability of neohesperidin dictates its neuroprotective activity: Implication in Alzheimer's disease therapeutics. **International Journal of Biological Macromolecules**. 176: 315-324. **(I.F. 6.953).**
3. Pakrashi, S., Chakraborty, J. and **Bandyopadhyay, J**. 2020. Neuroprotective Role of Quercetin on Rotenone-Induced Toxicity in SH-SY5Y Cell Line Through Modulation of Apoptotic and Autophagic Pathways**. Neurochemical Research**. 45(8): 1962-1973. (DOI 10.1007/s11064-020-03061-8). **(I.F. 3.996).**
4. Sinha, S., Shaw, S., Biswas, K., De, D., Das, S.C., Sarkar, A. and **Bandyopadhyay, J**. 2020. Favorable influence of ssDNA-functionalized SWCNT on the navigation pattern of *C. elegans*. **Microsystem Technologies,** 1-14. (DOI 10.1007/s00542-020-04906-6). **(I.F. 2.276)**

5. Rakshit, J., Priyam, A., Gowrishetty, K.K., Mishra, S. and **Bandyopadhyay**, J. 2020. Iron chelator Deferoxamine protects human neuroblastoma cell line SH-SY5Y from 6-Hydroxydopamine-induced apoptosis and autophagy dysfunction. **Journal of Trace Elements in Medicine and Biology**. 57:75-82.
(DOI 10.1016/j.jtemb. 2019. 126406). **(I.F. 3.849).**

6. Paul, T., Biswas, K., Mishra, S., Sinha, S. and **Bandyopadhyay, J**. 2020. Thermo-chemical micro-sensing system of a biological model organism *C. elegans* towards a chemical stimulus. **Microsystem Technologies**, Springer. 26: 2235-2241. (ISSN 0946-7076, DOI 10.1007/s00542-019-04568-z). **(I.F. 2.276).**

7. Kunal Biswas, Suranjana Mukherjee, Swati Sinha, **Jaya Bandyopadhyay** & Debashis De. 2020. Conductivity modulation of interstitially chemisorbed Manganese atom on Graphene for nanoelectronic application. Microsystem Technologies (DOI 10.1007/s00542-018-3912-4). 26: 3229-3242. **(I.F. 2.276).**

Research Projects:
R & D Project (2019-2022) on "Investigation of the activity of graphene and its derivatives towards the biological systems with special relevance to C. elegans" sanctioned by the Department of Higher Education, Science and Technology and Biotechnology, Government of West Bengal and under the supervision of Dr. Jaya Bandyopadhyay (Principal Investigator) & Prof. Debashis De (Co-Investigator) & Dr. Tufan Naiya (Co-Investigator).
Duration of Project: Three Years (3 years). Total Budget: Rs. 22.66 Lakhs.
Name of Senior Research Assistant: Sudhanshu Mishra, M.Tech (Hometown Jaunpur, Uttar Pradesh).

PhD Guided:

Name	Thesis/ Project Title
1. Kunal Biswas Awarded May 31, 2021	Investigation on the physio-chemical aspect of graphene for biocidal and biosensing applications
2. Swati Sinha Awarded June 04, 2021	Study of interaction properties of synthetic oligonucleotides with carbon nanotubes and their impacts on *Caenorhabditis elegans*
3. Sourav Pakrashi (Pre-PhD Seminar defended)	Neuroprotection of Quercetin in Rotenone and 6-OHDA-induced toxicity in Neuroblastoma cell line
4. Joyeeta Chakraborty Ph.D Scholar; Registered	Evaluation of ameliorative activities of polyphenols against heavy metal induced neurotoxicity: A therapeutic approach
5. Tanaya Paul Ph. D Scholar; Registered	Reproductive and developmental toxicity of phthalate esters on *Caenorhabditis elegans*

Dr Rina Rani Ray

Associate Professor

Qualification: M.Sc., PhD

Seminar/Webinar ~~organized/~~participated in 2020-21:
1.Webinar on Covid Vaccination: Myths and facts by MAKAUT, WB on 6th June, 2021
2. National webinar on "Post covid Diseases and Control" by Faculty of Life Science, Mandasar university, Mandasaur, MP on 7th June, 2021
3. International webinar on "Current Challenges and Future Prospects in Microbiology15-06-2021 (presented paper) Department of Microbiology, Maharaja Ganga Singh University, Bikaner and Microbiologist Society, India (presented paper)
4. International Webinar titled "Technological Microbiology -Application in Food Production" held on 18th November, 2020
5. Webinar on the response of start up community to COVID 19 (DBT)
6. IRMI Webinar: Managing Funded Program Oct 16th, 2020(DBT)

Workshop organized/participated in 2020-21:
Organised: 5-Day Workshop on "Next Generation Big Data Biology"(Oct 26-30th, 2020)
Participated in: International workshop on "ACS AUTHOR WORKSHOP" on November 25, 2020
Session Chair in "International Conference on Emerging Strategies in Antimicrobial Agents and Bio-innovations", organized by the Department of Microbiology, th th School of Science, RK University on 18 & 19 December 2020

Research Papers Published:
1. D. Lahiri, M. Nag, S. Garai, R. R Ray. The Chemistry Of Antibiofilm Phytocompounds, *Mini Reviews in Medicinal Chemistry,* 21(9): 2021 (I.F: 2.733)

2. S.Ghosh, A. Jasu and R. R Ray Hexavalent chromium bioremediation with insight into molecular aspect: an overview Bioremediation Journal(I.F: 1.724) https://doi.org/10.1080/10889868.2021.1884529

3. D. Lahiri, S. Chakraborti, A. Jasu, M. Nag, B. Dutta, S. Dash, R R Ray, Production and purification of bacteriocin from *Leuconostoc lactis* SM 2 strain, *Biocatalysis and Agricultural Biotechnology*, 2020, 30, 101845

4. D. Lahiri, M. Nag, H. I. Sheikh, T. Sarkar, H. Edinur, S. Pati, R R Ray, Microbiologically synthesized nanoparticles and their role in silencing the biofilm signaling cascade, *Frontiers in Microbiology*, doi: 10.3389/fmicb.2021.636588, 2021 (I.F 4.235)

5. D. Lahiri, M. Nag, I. Mukherjee, S. Ghosh, A. Dey, R R Ray. Catechin as the most efficient bioactive compound from *Azadirachta indica* with antibiofilm and antiquorum sensing

activities against dental biofilm: an in vitro and in silico study. *Applied Biochemistry and Biotechnology*, Springer, 2021 Jan 26. doi: 10.1007/s12010-021-03511-1 (I.F 2.277)

6. D. Lahiri, M. Nag, T. Sarkar, B. Dutta, R R Ray. Antibiofilm activity of α-Amylase from *Bacillus subtilis* and prediction of the optimized conditions for biofilm removal by Response Surface Methodology (RSM) and Artificial Neural Network (ANN). *Applied Biochemistry and Biotechnology*, Springer, 2021 Mar 1. doi: 10.1007/s12010-021-03509-9 (I.F 2.277)

7. Paul, O., Jasu, A., Lahiri D., Nag M., Ray R.R., Rina Rani In situ and Ex situ Bioremediation of Heavy Metals: The Present Scenario, *Journal of Environmental Engineering and Landscape Management* 2021 (Accepted for Publication 21-Dec-2020) (I.F 2.733)

8. S. Ghosh, D. Lahiri, M. Nag, A. Dey T. Sarkar, S K Pathak, H A Edinur, S. Pati, R R Ray, Bacterial biopolymer: Its role in pathogenesis to effective biomaterials, *Polymers (MDPI)*, 13(8), 2021. (I.F 3.426)

9. M. Nag, D. Lahiri, B. Dutta, G. Jadav, R. R.Ray Biodegradation of used polyethylene bags by a new marine strain of Alcaligenes faecalis LNDR-1, *Environmental Science and Pollution Research*, DOI : 10.1007/s11356-021-13704-0,(Accepted for Publication 29-Mar-2021) (I.F 3.306)

10. D.Lahiri, M. Nag, R. Banerjee, D. Mukherjee, S. Garai, H. Sheikh, T. Sarkar, H. A. Edinur, S. Pati, R. R. Ray, Amylases: biofilm inducer or biofilm inhibitor? *Frontiers Cellular and Infection Microbiology* 2021(DOI: 10.3389/fcimb.2021.660048) (I.F 4.123)

11. M. Nag, D. Lahiri, S. Dash, S. Garai, D. Mukherjee, R. Banerjee, R R Ray, Strategies of Nanomaterial Application for Enhanced Wound Curing: An Overview, *Nano Biomed. Eng.*, 13 (2), 2021

12. M. Nag, D. Lahiri, S. Pati, T. Sarkar, S. Ghosh, A. Dey, H. A.Edinur, R R Ray, Microbial fabrication of Nanomaterial & its role in Disintegration of Exopolymeric matrices of Biofilm, *Frontiers in Chemistry Nanoscience,* 2021 (Just accepted) doi: 10.3389/fchem.2021.690590 (I.F 3.693)

13. D. Lahiri, M. Nag, D. Mukherjee, S.Garai, R. Banerjee, R R Ray, Recent trends in approaches for optimization of process parameters for the production of microbial cellulase from wastes, Environmental Sustainability (2021).

14. M. Nag, D. Lahiri, S. Nath, R. Deb, A. Das, R. R.Ray, Structural Analyses of the Mode of Binding between T-Cell Surface Lycoprotein Cd4 with HIV gp120 C5 Protein Involved in HIV Infection and Search for Novel Phytocompounds for Its Treatment, *Heritage : Vol VI 2019*

15. D. Lahiri, M. Nag, B. Dutta, S. Dey, D. Mukherjee, S. J. Joshi, R. R.Ray, Antibiofilm and Anti-Quorum sensing Activities of Eugenol and Linalool From *Ocimum tenuiflorum* against *Pseudomonas aeruginosa* Biofilm, Journal of Applied Microbiology, 2021 (I F 3.066)

16. D. Lahiri, M. Nag, B. Dutta, T.Sarkar, R R Ray. Artificial Neural Network and Response Surface Methodology-Mediated Optimization of Bacteriocin Production by *Rhizobium leguminosarum*. *Iran J Sci Technol Trans Sci* (2021). (I.F 0.875)

Books/Book Chapter Published:

1. D. Lahiri, **M. Nag**, S. Garai, B. Dutta, R. R. Ray, Plant Communication with Associated Its Components, composition and Role in Maintaining Plant Homeostasis, Phytomicrobiome

Interactions and Sustainable Agriculture, **Wiley** (ISBN:9781119644620 , https://doi.org/10.1002/9781119644798.ch7), 2020

2. **M. Nag**, D. Lahiri, A. Ghosh, D. Das, R.R. Ray (2021) Quorum Sensing. In: Ray R.R., Nag M., Lahiri D. (eds) Biofilm-Mediated Diseases: Causes and Controls. **Springer**, Singapore. https://doi.org/10.1007/978-981-16-0745-5_2

3. B. Dutta, D. Lahiri, **M. Nag,** D. Mukherjee, R. R. Ray (2021) Introduction to Bacterial Biofilm and Acute Infections. In: Ray R.R., Nag M., Lahiri D. (eds) Biofilm-Mediated Diseases: Causes and Controls. **Springer**, Singapore. https://doi.org/10.1007/978-981-16-0745-5_1

4. D. Lahiri, **M. Nag**, A. Ghosh, D. Das, A. Dey, D. Mukherjee, S. Garai, R. R. Ray (2021) Biofilm and Antimicrobial Resistance. In: Ray R.R., Nag M., Lahiri D. (eds) Biofilm-Mediated Diseases: Causes and Controls. **Springer,** Singapore. https://doi.org/10.1007/978-981-16-0745-5_8

5. **M.Nag**, D. Lahiri, D. Mukherjee, S. Garai, R. Banerjee, R. R. Ray, Biofilms and Acute and Chronic Infections, In: Ray R.R., Nag M., Lahiri D. (eds) Biofilm-Mediated Diseases: Causes and Controls. **Springer**, Singapore. https://doi.org/10.1007/978-981-16-0745-5_1

6. D. Lahiri, **M. Nag**, D. Mukherjee, S. Garai, R. Banerjee, A. Dey, R. R. Ray, Biofilm on Medical Appliances In: Ray R.R., Nag M., Lahiri D. (eds) Biofilm-Mediated Diseases: Causes and Controls. **Springer**, Singapore. https://doi.org/10.1007/978-981-16-0745-5_1

7. M. Nag, D. Lahiri, B. Dutta, I. Mukherjee, S. Ghosh, R. R. Ray, Bacteriogenic silver nanoparticles: Mechanisms and applications, Nanobiotechnology: Microbes and plant assisted synthesis of nanoparticles, mechanisms and applications, (**Elsevier).** 61-74, 2021, ISBN: 9780128228784, doi.org/10.1016/B978-0-12-822878-4.00004-3

8. D. Lahiri, M. Nag, S. Garai, R. Banerjee, D. Mukherjee, B. Dutta, R. R. Ray Mycosynthesis of silver nanoparticles: Mechanism and applications, Nanobiotechnology: Microbes and plant assisted synthesis of nanoparticles, mechanisms and applications (**Elsevier**) 91-104, 2021, ISBN: 9780128228784, doi.org/10.1016/B978-0-12-822878-4.00006-7

9. D. Lahiri, M. Nag, S. Ghosh, R. R. Ray Green synthesis of Nanoparticles and their applications in the area of bioenergy and biofuel production. Nanomaterials - Applications in Biofuels and Bioenergy Production Systems(**Elsevier**), 195-219, 2021, ISBN: 9780128224014, doi.org/10.1016/B978-0-12-822401-4.00017-9

Book Publication
Ray R.R., Nag M., Lahiri D. (eds) **Biofilm-Mediated Diseases: Causes and Controls**. Springer, Singapore.

Research Project:
Studies of bioremediation strategies based on the multi metal tolerance of a new bacterial isolate. PROJECT OF DBT, WEST BENGAL, 06 (Sanc) /BT (Budg) /RD-21/2016, 03.01.17 (2017-20, continuing)

Refresher/Orientation Courses:
FDP on Trends in Biotechnology (Sept 15-19, 2020)
FDP on Art and Craft of Scientific and Technical Writing (A to Z) (Nov, 2-6, 2020)

PhD Guided:

Name of student	Project Title
Amrita Jasu (in WB DBT Project) [REGISTERED]	Bioremediation strategies on metal tolerance of a new bacterial isolate with special reference to Hexavalent chromium
Dibyajit Lahiri (in service) [REGISTERED]	Studies on bioactive antibiofilm compounds from natural sources.
Suhasini Mallick (ADF fellow) [ENROLLED]	Assessment of antimicrobial and antibiofilm activities of ZnO nanoparticles synthesized from various biogenic sources.
Sreejita Ghosh [ENROLLED]	Studies on bioactive and biogenic compounds as anti- biofilm agents.

Courses designed: Course Development Online videos are available here: https://www.youtube.com/channel/UCbZqILUBIyBZzVPFeIIsBqA?view_as=subscriber

Professional Activities:
Editor of Applied Biochemistry and Biotechnology,
Reviewer of Elsevier, Willey and Frontiers in Microbiology.

Dr. Ranjita Biswas
Associate Professor, Ramalingaswami Fellow,
Department of Biotechnology

Qualification: PhD in Microbial Bioprocess Technology, IIT Delhi.
Experiences: Asso. Prof. (2018-present) at MAKAUT, WB; Ramalingaswami Fellow/Asst. Prof. (2014-2018) – IIT Delhi; Post-doctoral Research Associate (2011-2014)- Oak Ridge National Lab, USA; Post-doctoral fellow (2008-2011)- Kobe University, Japan
Current area of research: CRISPR-cas genome editing tool box for application in Biorefinery; Biofuels; Nutraceuticals production.
Research Projects (Research Projects Initiated during the year)- Utilize a CRISPR cas tools for redirecting metabolic flux in *Thermoanaerobacterium* sp RBIIT for biobutanol production, Indo-US Mission Innovations, DBT, New Delhi, Rs 146 lakhs, 2020-23.

Ongoing Research Projects- Development of *Thermoanaerobacterium* sp. RBIIT as a biorefinery platform strain for production of n-butanol and butyrate. DBT, New Delhi, Rs. 88 lakhs, 2015-2020.

Collaboration: The Thayer School of Engineering, Dartmouth College, Hanover, USA.

Professional activities:

1. Coordinator, PhD Cell, MAKAUT, WB.
2. TEQIP III Academic nodal
3. Faculty-in-Charge, Centre for Bioresource Utilization & Bioeconomy

Dr. Tufan Naiya
Assistant Professor

Qualification: PhD

Workshop organized/participated in 2020-21: 2 (1- as Co-ordinator + 1 as participant)

Research Papers Published: 2

Taunk K, Kalita B, Kale V, Chanukuppa V, **Naiya T**, Zingde SM, Rapole S. The development and clinical applications of proteomics: an Indian perspective. Expert Rev Proteomics. 2020 Jun;17(6):433-451(IF- 3.94)

Gogoi B, Chowdhury P, Goswami N, Gogoi N, **Naiya T**, Chetia P, Mahanta S, Chetia D, Tanti B, Borah P, Handique PJ. Identification of potential plant-based inhibitor against viral proteases of SARS-CoV-2 through molecular docking, MM-PBSA binding energy calculations and molecular dynamics simulation. Mol Divers. 2021 Aug;25(3):1963-1977(IF- 2.943)

PhD Guided: 2 (Registered)

Dr. Smarajit Das
Assistant Professor (Department of Biotechnology) & Head (Department of Bioinformatics)

Brief profile

Dr Smarajit Das joined in this University at July 2018 after completing PhD in Bioinformatics from Indian Association for the Cultivation of Science and Jadavpur University. He also achieved three postdoctoral degree in several university in India and abroad. In the University of Gothenburg Sweden, he started a new field of research, namely Cancer Bioinformatics. In this branch he analyzed several RNA seq and Epigenetics data under the branch of Next Generation Sequence analysis. At the Department of Genetics, University of Georgia, USA, he engaged himself in another branch of Bioinformatics, namely Metagenomics. He published a book in this field namely**, "Microbiomics, Bioinformatics, Systems Biology and Modeling: A Publishable Project-Based**

Approach". The goal of this book is to develop a computational and hands on approach for senior undergraduate and starting graduate students to undertake both microbial and host::microbe studies of the complex world of microbes that surround us all. Each chapter develops particular bioinformatics, computational, systems biology and modelling skills using both the literature, in class assignments, and facile wet bench research focused on microbes on humans, in rats, in plants, and in the air/water/soil that constitute our environment. Furthermore, the chapters provide experiments and experimental suggestions as to how any course designer can generate novel research and analyze them for an outcome that would be publishable as refereed research. During 18 years long career he published more than 30 papers in national, international and conference journal proceedings. He is the member of RNA society, American Association for Cancer research [AACR]. In MAKAUT, WB he has established a high-level Bioinformatics lab and a smart class under the Department of Biotechnology.

Seminar Conference 2020-21
      1. FDP on Application of R in Bioiformatics. MAKAUT September 2020 As Organiser
      2. Workshop on Metagenomics s. MAKAUT,WB October 2020. As organizer.

Course Designed: In MSc Microbiology, MSc Molecular Biology and MSc Genetics he has designed the applied bioinformatics course. He also reformed the Genomics and Proteomics syllabus for Molecular Biology and MSc Genetics students.

Project Proposal Sanctioned:
Title: **Epigenetic of overlapping non coding transcription and gene induction dynamics.**
Sponsoring Agency: **UGC** ; Amount: Rupees 10 lakhs receiver at April 2020
Project Scholar who did their Project under Dr Smarajit Das include 2 MSc Biotech Students in 2020-21, 1 MSc Microbiology student in 2020-21, 3 M.Tech Biotech Students in 2020-21

Dr. Debdut Naskar
Assistant Professor

Qualification: PhD

Seminar/Webinar organized/participated in 2020-21: 1

Workshop organized/participated in 2020-21: 1
Invited Lectures in 2020-21: 1
Research Papers Published: 1
Research Projects: 2 (Continuing)
Refresher/Orientation Courses: 1 (AICTE approved FDP from NPTEL)
PhD Guided: 1 (Registered)

Dr. Suryyani Deb
Assistant Professor (UGC)

Qualification: PhD

Seminar/Webinar organized/participated in 2020-21:
- Faculty Development Program in Advance Research techniques (08/08/2020 to 23/08/2020)
- Pedagogy Course in Learning How to Learn: Powerful mental tools to help you master tough subjects (14/08/2020 to 28/09/2020)
- Faculty Development Program in Trends in Biotechnology (15/09/2020 to 19/09/2020)
- Skill Development Course in Basics of Extrecellular Vesicles (end date 06/2020). (University of California, Irvine)
- Skill Development in Extracellular Vesicles in Health and Disease (end date 05/2020). (University of California, Irvine)
- Faculty Development Program in Bioinformatics and its recent application (9/2020)
- Hands on Training on Art of Writing Technical Paper, AICTE sponsored Course (1st to 6th June 2021), 6 days short term Training Program.

Workshop organized/participated in 2020-21:
Trends in Biotechnology (Faculty Development Programme) (15/09/2020 to 19/09/2020)

Research Papers Published:
1. Geyunjian H Zhu, Mohammad Azharuddin, Rakibul Islam, Hassan Rahmoune, Suryyani Deb et al. Innate Immune Invisible Ultrasmall Gold Nanoparticles—Framework for Synthesis and Evaluation. ACS Applied Materials & Interfaces 2021 [published as Article ASAP] (DOI: 10.1021/acsami.1c02834)
2. Rajib De, Ranjini Chowdhury, Tuphan Kanti Dolai, Biswajit Bhar, Mohammad Mirazul Islam, Prantar Chakrabarty, Suryyani Deb. A Pilot Study on Probing of Imatinib Induced Platelet Dysfunction in Patients with Chronic Myeloid Leukemia-Chronic Phase and Absence of Associated Bleeding Manifestation. Indian Journal of Hematology and Blood Transfusion.2020; 37, (162–166) (ISSN: 0974-0449).
3. Suryyani. Deb, N. Boknäs, C. Sjöström, A. Tharmakulanathan 1, K. Lotfi , S. Ramström. Varying effects of tyrosine kinase inhibitors on platelet function – a need for individualized CML treatment to minimize the risk for hemostatic and thrombotic complications? Cancer Med. 2020;9(1):313-323 (ISSN:2045-7634).

Books/Book Chapter Published: Ranjini Chowdhury, Suryyani Deb. Platelets in Diagnostic. Modern Techniques in Biosensors. 275-291, (ISBN: 978-981-15-9612-4). Editors: Gorachand Dutta, Arindam Biswas, Amlan Chakrabarti. Springer Publisher, February 2021

Research Projects: Project Category: DST,DT Govt of West Bengal (2021-2024) Project Title: Study of tyrosine kinase inhibitors on platelet function and refining management of haematological malignancies by predicting complications, Govt. of WB. (Funding amount: Rs. 930000).

Sayantani Majumder
Full time Contractual Faculty, Department of Biotechnology

Qualification: Mtech

Sayantani Majumder has completed Bachelor of Technology (B.Tech) in Biotechnology from Institute of Technology & Marine Engineering (Now NITMAS) under WBUT in 2006. After that, she worked as "Research-Assistant" at "S.N Pradhan Centre for Neuroscience "under University of Calcutta in Neurogenetics of Parkinson's Disease. At the same time, she was a"Part-time Lecturer" at the" Institute of Technology & Marine Engineering"(ITME) in the Department of Biotechnology. Then in 2009, she went to University of Western Ontario, Canada as a "Graduate Student" in the Department of Neuroscience with Western Research Graduate Scholarship along with "Graduate- Teaching –Assistantships" from University of Western Ontario, Canada in two departments – Psychology & Anatomy and Cell Biology. But unfortunately due to funding problem, returned to India in 2010 and joined Master of Technology (M.Tech) in Biotechnology at Haldia Institute of Technology under WBUT. After completion of M.Tech she joined Indian Institute of Technology, Kharagpur (IIT-KGP) as "Senior Research Fellow" (SRF) at "School of Medical Science & Technology" (SMST) in Metabolomics in clinical research (Reproductive Medicine). She also has a job experience as "Copy- Editor" in IT sector. On 24th October, 2019, she joined MAKAUT.

She has research experiences in various areas of Biotechnology such as Molecular Biology, Environmental Carcinogenesis, and Toxicology and has co-authored in peer reviewed publications.

Awards:
1) Western Graduate Research Scholarship from Dept. of Neuroscience, University of Western Ontario, Canada.
2) Senior Research Fellowship (SRF) from Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India.

Work at MAKAUT during 2 yrs (2019 – present) : Taught the core subjects of Biotechnology (Theory) as well as practical classes to B.Sc – Biotechnology (3 years) students

Subjects taught: Biochemistry & Metabolism, Cell Biology, Biotechnology and Human welfare**,** General Microbiology, Plant and Mammalian Physiology, Introduction to Environmental Sciences**,** Immunology**,** Molecular Biology**,** Genetics**,** Bioprocess**,** Microscopy & Spectroscopy (Generic subject)

Bani Kumar Pathak

Assistant Professor

Qualifications: Selected as UGC-Dr. D.S. Kothari Post-Doctoral Fellow

(2020-2021)

Seminar/Webinar organized/participated in 2020-21: Four

Workshop organized/participated in 2020-21: 1

Research Papers Published: Three

1. **Bani K Pathak**, Debajyoti Das, Sayan Bhakta, Partha Chakrabarti, Jayati Sengupta., Resveratrol as a nontoxic excipient stabilizes insulin in a bioactive hexameric form. *Journal of Computer-Aided Molecular* **Design**, https://doi.org/10.1007/s10822-020-00311-3. (2020). Impact Factor: 3.6
2. Ferdosh S, Banerjee S, **Pathak B K**, Sengupta J & Barat C., Hibernating ribosomes exhibit chaperoning activity but can resist unfolded protein-mediated subunit dissociation. *FEBS Journal,* *https://doi.org/10.1111/febs.15479*. (2020). Impact Factor: 4.5
3. Rajanya Bhattacharyya, Sayan Bhattacharjee, **Bani K. Pathak**, Jayati Sengupta., A heptameric peptide interferes with Aβ aggregation by structural reorganization of the toxic oligomers. *ACS omega*, 5, 26, 16128–16138. (2020). Impact Factor: 3.5

Research Projects: One

MoU/Collaboration: With Dr. Jayati Sengupta, CSIR-Indian Institute of Chemical Biology

Consultancy Extended: One

Professional Activities: Teaching both Under Graduate and Post graduate courses, Research and Development**.**

Any other information: Wrote one Project Grant entitled "Effects of Natural small molecules and small peptide on metabolic and neurodegenerative diseases related peptide/protein aggregation"

Dr. Arnab Kumar Ghosh

Assistant Professor

Qualifications: Phd

Seminar/Webinar organized/participated in 2020-21: Two

Workshop organized/participated in 2020-21: 2

Research Papers Published: Three

1**.** Mishra S, Chattopadhyay A, Naaz S, Banerjee A, **Ghosh AK**, Pal PK, Bhattacharyya T, Das A, Chattopadhyay S, Bandyopadhyay D, Oleic acid as a restorative agent in alleviating adrenaline induced altered morphofunctional milieu of gastric tissue and mitochondria, Heliyon, 7(3), 2021,0e6476. Impact Factor:0.432

2**.** Banerjee A, Dey T, **Ghosh AK**, Mishra S, Bandyopadhyay D, Chattopadhyay A, Insights into the ameliorative effect of oleic acid in rejuvenating phenylhydrazine induced oxidative stress mediated morpho-functionally dismantled erythrocytes, Toxicology Reports,7,2020,1551-1563.Impact factor: 4.07

3**. Ghosh AK**, Bhattacharjee B, Mishra S, Roy S, Chattopadhyay A, Banerjee A, Bandyopadhyay D, Beta-estradiol protects against copper-ascorbate induced oxidative damage in goat liver mitochondria in vitro by binding with ascorbic acid, Life Sciences,2020,250,117596.Impact factor:3.647

Books/Book Chapter Published: One

Ghosh AK, Anti-Inflammatory Activities of the Eudicots in Triphala, A Handbook of Agriculture and Plant Sciences, Chapter 13,2021(ISBN No: 978-93-91002-25-1).

MoU/Collaboration: with

1. Dr. Debasish Bandyopadhyay, Dept. of Physiology, University of Calcutta
2. Dr. Anirban Siddhanta, Dept. of Biochemistry, University of Calcutta
3. Dr. Srijan Haldar, Dept. of Biochemistry, Adamas University, Kolkata.

Consultancy Extended: One

Professional Activities: Teaching both Under Graduate and Post graduate courses.

Any other information: Wrote one Project Grant entitled "Combinatorial effect of curcumin and melatonin against arsenic induced hepatic carcinoma."

Department of Bioinformatics

Dr. Soumen Kumar Pati
Associate Professor

Qualifications : Phd (IIEST), M.Tech (JU)

Teaching Experience: Dr. Soumen Kumar Pati is currently an Associate Professor in the Department of Bioinformatics, Maulana Abul Kalam Azad University of Technology, Nadia, West Bengal. Previously he was a Lecturer in the Department of Information Technology, St. Thomas' College of Engineering and Technology, 4-Diamond Harbor Road, Kolkata-700023 for the period 2005-2010 and was promoted to the rank of Assistant Professor in 2010.

Research Experience : As part of his research work leading to a Ph.D. degree, Soumen Kumar Pati worked with analysis of microarray dataset using data mining techniques in Bioinformatics field. He also pursued his research on preprocessing of microarray dataset, cluster analysis, significant informative gene selection, classification on the dataset and COVID-19 data analysis and treatment. His current research work includes areas of Data Mining, Artificial Intelligence, Soft Computing, Pattern Recognition, Social Network, Network security, Machine Learning etc.

Publication Details (2020-21) :

1. **Soumen K Pati**, Arijit Ghosh, Ayan Banerjee, Indrani Roy, Preetam Ghosh, Chiraag Kakar, *Data Analysis on Cancer Disease Using Machine Learning Techniques*, Advanced Machine Learning Approaches in Cancer Prognosisvol 204. pp.13 – 73, Springer, Cham. https://doi.org/10.1007/978-3-030-71975-3_2, 2021. (ISBN: 978-3-030-71974-6, eBook ISBN: 978-3-030-71975-3) (**Book Chapter**)

2. **Soumen K Pati**, Ayan Banerjee, *Predicting Antiviral Drugs for COVID-19 Treatment Using Artificial Intelligence Based Approach*, Understanding COVID-19: The Role of Computational Intelligence, vol 963, pp. 245-269, Springer, Cham. https://doi.org/10.1007/978-3-030-74761-9_11, 2021. (ISBN: 978-3-030-74760-2, eBook ISBN: 978-3-030-74761-9) (**Book chapter**)

3. Anirban Bej, Indrani Roy, Suchinta Chanda, Arijit Ghosh, **Soumen Kumar Pati**, "Feature Mining and Classification of Microarray Data Using Modified ResNet-SVM Architecture", Computational Intelligence in Pattern Recognition, Advances in Intelligent Systems and Computing, vol 1349, pp. 317-328, 2021. (ISSN=2194-5357) (**International Conference**).

4. Manna S., Roy I., Majumder D., Banerjee A., **Pati Soumen.K.**, Multiple Data Integration Using Joint Non-negative Matrix Factorization, Computational Intelligence in Pattern Recognition, Advances in Intelligent Systems and

Computing, vol 1349, 667-677, 2021. (ISSN=2194-5357) (**International Conference**).

Seminars/ Conferences Organized/Attended (2020-21)

(a) Acted as PUBLICATION CHAIR in the international conference (CIPR-2020) at IEM college.
(b) Attended a FDP on "Recent Research Trends in AI/ML and Data Science", 5th to 10th July, 2021, JIS College of Engineering.

Training Programme/ Workshop organized (2020-21): Acted as PROGRAM COORDINATOR of the online workshop and hands-on training on "Bioinformatics and Its Recent Application", 10th and 11th September, 2020, MAKAUT.

Ph.D. Guided (2020-21):

(a) Analysis of Social Networking Data by Mr. Ajit Kumar Das (Registration No. Ph.D/R/2016/0123) in Indian Institute of Engineering Science & Technology, Shibpur, West Bengal.
(b) "OBJECT IDENTIFICATION IN MEDICAL IMAGES USING INTELLIGENT METHODS" by Mrs. Sujata Ghatak (Reg. No. PHD/Tech/CSE107/2019) in Maulana Abul Kalam Azad University of Technology, West Bengal,

M.Tech Projects Guided (2020-21): Guided **Two Final Year Project Thesis**.

Courses designed (2020-21)

(a) Designed the Syllabus **M.Sc in Bioinformatics** as the Coordinator of the course.

(b) Designed the Sylalbus **B.Sc in Bioinformatics** as the Coordinator of the course.

New laboratory set up (2020-21): Dr. Soumen Kumar Pati set up the **Bioinformatics Laboratory** as the faculty of the department.

The School of Food, Pharmaceutical and Medical Sciences & Technology

Prof. Pranabesh Chakraborty

Director

About the School:

The School of Food, Pharmaceutical and Medical Science and Technology was developed under the umbrella of Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal, until recently in 2020 with an objective to provide outcome based education and research in the field of food, pharmaceutical and medical sciences and technology. The School consists of two departments namely Food Science & Technology and Pharmaceutical Science and Technology.

The School offers both undergraduate B. Sc and M. Sc courses in the Food Science and Technology department. The M.Sc. course was introduced in 2019 whereas the B.Sc. course has been introduced in 2020. The admission of students is carried out by CET conducted by MAKAUT.

The department of Pharmaceutical Science and Technology operating under the school offers two year (four semesters) post graduate programme in Pharmacology and Pharmaceutics (M. Pharm in Pharmacology & Pharmaceutics). The M. Pharm courses have been duly approved by PCI and are introduced recently in 2020. The student intake for both the courses is 15 each. The admission of students for both the courses is conducted through PGET.

The School of Food, Pharmaceutical and Medical Science and Technology thus focused to shape intellectually competent and ingeniously gifted professionals & technologists and successful entrepreneurs and update our faculty members in emerging area having socio-environmental consciousness and ethics who can work as individual or in group in multi-cultural global environments for continuing significantly towards the betterment of quality of human life.

Departments run by the School are as follows:
- Dept of Pharmaceutical Science & Technology
- Dept of Food Science & Technology

Department of Pharmaceutical Sc. & Technology
Head of the Department :Prof. Chowdhury Mobaswar Hossain

Objective of the Department

Pharmaceutical Science & Technology is a department of MAKAUT, WB under the School of Food, Pharmaceutical and Medical Science & Technology. Objective of our Department is to teach and train our students with updated knowledge and technology in various sophisticated branches of Pharmaceutical sciences through innovative pedagogy and motivate them to interdisciplinary research in order to produce competent leaders, scientists who can take up challenges and responsibilities as Pharmaceutical Technologists for improving quality of health in community in order to promote well being in mankind.

COURSES:

1. M. Pharm courses (Approved by Pharmacy Council of India, New Delhi)
   i) M. Pharm in Pharmacology: Intake-15
   ii) M. Pharm in Pharmaceutics: Intake-15

Admission to M. Pharm in MAKAUT course is conducted through PGET.

2. PG diploma/ Certificate courses in Pharmacovigilance Jointly with WIPRO Limited (under process)

Futuristic Plans:

➢ To start PG diploma course with WIPRO /C-DAC/Peerless Hospital on
- Data Analytics
- Quality Assurance
- Regulatory Affairs
- Medical Writing
- Clinical Data Management
- Artificial Intelligence/ML

➢ Online FDP and certificate courses

➢ Development of e-Content

➢ To organize WEBINAR series on relevant topic

➢ To Establish Drug Information Services (DIS) in MAKAUT

Faculty of the Department of Pharmaceutical Sciences & Technology:

1. Prof. Pranabesh Chakraborty, Director, School of Food, Pharmaceutical and Medical Science & Technology.

2. Prof. Chowdhury Mobaswar Hossain, Professor & HoD
3. Prof. Arup Mukherjee,Adjunct Professor (Details provided in the Dept of Biotech)
4. Dr. Jayanta Chattopadhyay, Adjunct Professor
5. Dr. Tapas Kumar Pal, Adjunct Professor
6. Dr. Kazi Asraf Ali, Assistant Professor
7. Dr. Moitreyee Chattopadhyay, Assistant Professor
8. Dr. Sandipan Dasgupta, Assistant Professor
9. Mr. Dipesh Chakraborty, Assistant Professor

Webinar Conducted:

SL. No.	Name of the workshop/ seminar	Date
1	Reimagining Pharma Manufacturing in the Post Covid World	15-08-2020
2	AI/ML in Pharmaceutical Scienecs	03-09-2020
3	Future Prospects of PV and Drug Safety	07-11-2020
4	FDP on Road to IT-enabled Future Pharma Industry	23 to 28 February 2021

Faculty Profile

Prof. Pranabesh Chakraborty

Director, School of Food, Pharmaceutical and Medical Science & Technology

Qualification: M.Pharm, Ph.D. (Jadavpur University)

Experiences: 35 years of Teaching, Research & Administrative Experience. Worked as Chief of Quality Control in Atlas Chemicals, Kolkata for one year.

Academic Research & Administrative Experience: Total 35 years

➢ UGC PROFESSOR (2020-PRESENT): Maulana Abul Kalam Azad University of Technology, West Bengal

➢ DIRECTOR & ADVISER (ACADEMIC & RESEARCH) 2010-2020: Bengal School of Technology and Bengal School of Technology & Management, Sugandha, Hooghly under MAKAUT, WB

➢ Founder PRINCIPAL (2000-2010): First Pharmaceutical College in West Bengal
Gupta College of Technological Sciences, Asansol under WBUT, WB

➢ Founder PRINCIPAL (1985-2000) : Kanak Manjuri Institute of Pharmaceutical Technology and Sciences, Rourkela under Sambalpur University,

Research Experience And Fellowships:
- U.G.C. Fellow(1977-79).
- I.C.M.R. SRF FELLOW (1980-82).
- U.G.C. SRF FELLOW (1982-85).

Research Publications During 2020-21:

1. Hossain CM, Dutta D, Vichare R, Biswal MR, Ali KA, Chakraborty P. Silk protein-based nanomaterials in drug delivery and biomedical applications. InBiopolymer-Based Nanomaterials in Drug Delivery and Biomedical Applications 2021 Jan 1 (pp. 447-463). Academic Press. Elsevier.

2. Ali KA, Pradyot K Roy, Chakraborty P, Tailor-made cyclodextrin based nanomaterials as drug carriers. Tailor-made and functionalized biopolymer system. ELSEVIER, Academic Press. 2021.

Awards Received:
- Received ATI VISISTHA CHIKITSA MEDAL for outstanding contribution in Teaching, Research and Service to Mankind
- Honorary life member of ACCP (Association of Colleges of Chest Physicians, India) in recognition of outstanding services rendered to the public
- Received BEST PRINCIPAL AWARD-2010, NEW DELHI

No. of Ph.D Produced: Ten (10)

Presently guiding: Six (06) Ph.D Scholars

Post-graduate thesis guided: More than 100 M. Pharm students Present Research Activities: Guiding six fellows for their PhD Degree in collaboration with Jadavpur University, Kolkata and MAKAUT (Formerly known as West Bengal University of Technology), Kolkata.

Courses Designed:
1. **Pg Diploma In Pharmacovigilance & Drug Safety With Wipro Ltd.**
2. **Pg Diploma In Pharmaceutical Analytics With C-Dac, Kolkata.**
3. **Digital Health & Technology**

MoU/Collaboartion: MoU With Wipro On Pharmacovigilnce & Drug Safety (Under Process)**.**

Member Of the Academic Bodies:
- Chancellor's nominee for selection of faculty members in Jadavpur University Kolkata
- Vice Chancellor's nominee in CAS for promotion of faculty members in dept of Pharmaceutical Technology, Jadavpur University, Kolkata
- External Expert in BOS in the Dept of pharmaceutical Technology, Jadavpur University Kolkata
- Executive Council member of MAKAUT, WB
- Screening & selection committee member, MAKAUT

- Former Convener and Vice-Chairman, PhD committee, WBUT
- Former selection committee member, West Bengal Joint Entrance Examination Board (WBJEEB).
- Advisor, Animal & fisheries University, West Bengal
- Chairman, PhD committee, Biju Pattanayak University of Technology (BPUT), Orissa
- Doctoral Thesis Evaluator of Jadavpur University, Dibrugarh university, Berhampore University, Guwahati University, Sambalpur University, BPUT etc.
- Founder of Jadavpur University Research Scholars Association (JURSA), Jadavpur University, Kolkata.
- Founder of West Bengal Research Scholar's Association
- Founder of Orissa Pharmacy College Association (OPCA)
- Former Chairman, Board of Studies in Pharmaceutical Technology, Sambalpur University, Jyoti Vihar, Orissa for consecutive 9 years.
- Former Chairman, Examination Conducting Board in Pharmaceutical Technology, Sambalpur University, Jyoti Vihar, Orissa.
- Member of the Academic Council, Sambalpur University, JyotiVihar, Orissa.
- Member, Board of Studies in Pharmaceutical Technology, Berhampur University, Berhampur, Orissa.
- Academic Council Member, Sambalpur University and Berhampur University, Orissa.
- Former Principals' Representative (Appointed by the Governor of Orissa) & Executive Council member in the State Board of Pharmacy (OSBP), Orissa.
- Honorary life member of ACCP (Association of Colleges of Chest Physicians, India) in recognition of outstanding services rendered to the public.
- Member, Indian Society for Technical Education (ISTE), IIT Campus, New Delhi.
- Convener and Member, Board of Studies in Pharmaceutical Technology, The University of Burdwan, West Bengal.
- Member, UG Council, The University of Burdwan, West Bengal.
- Convener, Course & PhD Committee, West Bengal University of Technology, Kolkata, West Bengal.
- Head Examiner, Paper setter & Selection Committee member of different Universities like Jadavpur University , WBUT, University of Burdwan, North Bengal University, Sambalpur University, Berhampur University, Utkal University, BIT (Meshra), West Bengal Health University, Kolkata , Guwahati University, Dibrugarh University, Tripura University etc.

Technical Expertise:
- AICTE
- PCI

- ➤ NAAC
- ➤ NBA
- ➤ UGC
- ➤ NIRF
- ➤ AISHE

Editors Of Prestigious Journals:
- ➤ Chief Editor, Global Journal of Society Science and Technology
- ➤ Editor, International Journal of Pharmacovigilance

Member Of Professional And Scientific Society
- ➤ Founder member of Pharmaceutical Technologists Association (PTA)
- ➤ Founder & life member of Indian Pharmaceutical Graduates Association (IPGA)
- ➤ Member, Indian Society for Technical Education (ISTE), IIT Campus, New Delhi.
- ➤ Member, Board of Studies in Pharmaceutical Technology, The University of Burdwan, West Bengal.

Prof. (Dr.) C M Hossain

Professor & HoD, Department of Pharmaceutical Science & Technology

Qualifications: M.Pharm, PhD(JU), Former Post-Doctoral Fellow (University of Florida, USA

Research Interest: His research interest focused on the chemoprevention of diseases like cancer, diabetes, infectious diseases in a defined animal model particularly drug discovery and *in vivo* pharmacology. My focus is to find out potential biological target as well as to uncover the mechanism of action of drug at the molecular level with the help of microbiology, molecular biology, immunology and pharmacological techniques. Once a target is defined, the process shifts from basic research to the discovery of a therapeutic approach. Recently, I have been working on the involvement of host defense peptides (HDPs) such as beta-defensin in the innate immunity against infectious diseases and trying to explore the effect of Defensin Peptide mimetics against the pathogenesis of microbial infection. My goal is to develop safe and efficacious novel therapeutic compounds for treating life threatening and debilitating ailments.

Award/ Medal/Fellowship:
- ➤ Enlisted in world scientist and university rankings 2021- ad scientific index 2021.

- Postdoctoral Fellowship: at University of Florida, USA by National Institute of Health (NIH), USA
- Teacher of the Year Award": for excellence in Teaching, Learning & Research by MAKAUT, WB.
- DST- Inspire Award: Most prestigious fellowship of govt. of india by Department of Sciences & Technology (DST), New Delhi, Govt of India.
- University Gold Medal Award: for securing first class first position by west bengal university of technology, kolkata.
- Awarded GATE score twice by IIT MADRAS & IIT ROORKEE on behalf of MHRD, Govt of India, respectively
- Awarded 2nd position in oral presentation in IAPST-INTERNATIONAL CONFERENCE by Jadavpur University Kolkata.
- Gyanendra Medal Award: for securing highest marks in H.S by Nalhati Hariprasad High School, Birbhum.
- 1st prize award in debate on "origin of life" by West Bengal Bigyan Mancha.

Publications (2020-2021):

Google Scholar Link: <https://scholar.google.co.in/citations?user=9wUNaCAAAAAJ&hl=en>

- Lisa K. Ryan, Amy G Hise, Chowdhury Mobaswar Hossain, William Ruddick Rezwana Parveen, Katie B. Freeman, Damian G. Weaver. Hema P. Narra, Richard W. Scott and Gill Diamond. A Novel Immuno competent Mouse Model for Testing Anti fungal Drugs Against Invasive Candida albicans Infection, Journal of Fungi (2021.Published).
- Menzel, L., Chowdhury Mobaswar Hossain, Ryan, L.K., Diamond, G. Activation of vitamin D in the gingival epithelium and itsrole in gingival inflammation and alveolarboneloss. Journal of PeriodontalResearch, 1-9 (ISSN: 1600-0765) (Published).
- Piyali Basak Laha and Chowdhury Mobaswar Hossain. Synthesis Characterization of Methyl-diphenyl-diisocyanate (MDI) basedbiodegradablepolyurethane membrane as an implant coat to cure implant infection. International Journal of PolymericMaterials and Materials in Medicine (published, 2021).
- PiyaliBasakLaha and Chowdhury Mobaswar Hossain."Revisitingtherapeuticpotentials of ethanolicextract of Curcumalonga L. rhizomes to evaluatewoundhealing progression upontopical application of itsointment".Indian Journal of Pharmaceutical Education and Research (Publsihed 2021).
- DharmajitPattanayak, Jagdish K Arun, RameshAdepu, B. Shrivastava1, Chowdhury Mobaswar Hossain,Saumya Das. Formulation and Evaluation of Floating and Mucoadhesive Tablets Containing Rapaglinide. Research J. Pharm. And Tech; (Published 2021).

- Piyali Basak Laha and Chowdhury Mobaswar Hossain. "Synthesis and characterization of ester-diol based polyurethane: A potentiality check for hypopharyngeal tissue engineering application". Biomedical Engineering Letters (Published, 2021).
- Tathagata Adhikari, **Chowdhury Mobaswar Hossain** & Piyali Basak.Revisiting Therapeutic Potentials of Etahnolic Extract of Curcuma Longa L. Rhizomes to Evaluate wound Healing Progression upon Topical Application of its Ointment. Indian Journal of Pharmaceutical Education & Research 2020, 54 (4).

Book Edited (International) (2020-2021) :

Title Of Book : Biopolymer-Based Nanomaterials In Drug Delivery And Biomedical Applications. ISBN : 9780128208755, Page Count 628, 2021, ELSEVIER.

Book Chapters (International) (2020-2021) :

- Md. AdilS haharyar, Mahfoozur Rahman, Kumar Anand, Chowdhury Mobaswar Hossain, Imran Kazmi, and Sanmoy Karmakar. Rosmarinic Acid: A Boon in the Management of Cardiovascular Disease in a book titled**Biomarkers as Targeted Herbal Drug Discovery: A Pharmacological Approach to Nanomedicines. Publisher: Apple Academic Press (Published 2021).**

- Chowdhury Mobaswar Hossain and Pranabesh Chakraborty**. Title of Book chapter: Silk Protein Based Nanomaterials in Drug Delivery and Biomedical Applications. Title of Book: Biopolymer Based Nanomaterials in Drug Delivery and Biomedical Applications. Elsevier Publications (Published 2021).**

- Kazi Asraf Ali and Chowdhury Mobaswar Hossain. Title of Book chapter: Starch based nanomaterials in drug delivery applications. Title of Book: Biopolymer Based Nanomaterials in Drug Delivery and Biomedical Applications.Elsevier Publications **(Published 2021).**

- Manas R Biswal and Chowdhury Mobaswar Hossain. Title of Book chapter: Collagen-based nanomaterials in drug delivery and biomedical applications. Title of Book: Biopolymer Based Nanomaterials in Drug Delivery and Biomedical Applications. Elsevier Publications **(Published 2021).**

Refresher Courses:
- **Completed two weeks QIP refresher courses in Jadavpur University, Kolkata**

➢ **Completed 3 months Refresher Course on English in the Dept. of Linguistic, University of Florida, USA.**

➢ **Completed 04 days Academic Leadership Training & management of Principal, Vice-Chancellor on   at Aligarh Muslim University**

Online Coursera Courses (2020-2021):

➢ **"Patient Safety and Quality Improvement: Developing a Systems View (Patient Safety I)" by John Hopkins University, USA**

➢ **"Coronavirus Disease 2019 by Harvard University", USA**

➢ **"Drug Development" by University of San Diego, USA**

➢ **"Bacteria and Chronic Infections" by University of Copenhagen**

➢ **"Case Studies in Personalized Medicine" by Vanderbilt University, USA.**

➢ **"Drug Discovery" by University of San Diego, USA**

➢ **"COVID-19: What You Need to Know (CME Eligible) by Osmosis", USA**

➢ **Let's Break the Chain of COVID-19 Infection by Mohammed Bin Rashid University of Medicine & Health Sciences, Saudi Arabia.**

Webinar / Conference Organized (2020-2021):

➢ **Webinar on Role of Data Analytics in Pharmaceutical Sciences   at MAKAUT,WB in collaboration with Dubai College of Pharmacy, UAE on June 19, 2020.**

➢ **Webinar on AI/ML in Pharmaceutical Sciences at MAKAUT,WB in Collaboration with Dr. Jenny, University of Florida, USA and Dr. S. Bhattacharya, University of Texas, Austin, US on Sept 3, 2020 (Proposal submitted for conduction of Webinar).**

➢ **Webinar on Pharmacovigilance & Drug safety at MAKAUT,WB in Collaboration with Wipro Ltd on July 11, 2020 (Proposal submitted for conduction of Webinar).**

➢ **Webinar On Reimagining Pharma manufacturing in post Covid scenario in collaboration with Lupin Pharmaceutical Ltd on August 15, 2020 (Proposal submitted for conduction of Webinar).**

Industry Project: **NIH funded project New Antifungal Drug Research with Foxchase Chemical Diversity Centre, USA (Grant: R44: 00115661).**

PG Students Guided**: Sixteen (18)**

Ph.D. Candidate Enrolled**: Four (04)**

Invited Talks (2020-2021) :

- Invited Lecture on Universal Human value as a part of AICTE student Induction programme at Bharat Technology on NO 24, 2020.
- Invited talk on **Drug Discovery** at Basanti Devi College, Calcutta University on June 6, 2020.
- Invited Talk on **Antibiotic Resistance** at Dept of Pharmacy, Chandannagore women Polytecnic on 24th September, 2020.
- Invited talk on **Bench to Bed: Drug Design & Discovery** at BCDA College of Pharmacy in World Pharmacists day on 25th September, 2020.

Technical Expertise:
- AICTE
- PCI
- NAAC
- NBA
- UGC
- NIRF
- AISHE
- INSPECTION OF AICTE & NON-AICTE COLLEGES

Courses Designed:
- PG Diploma in Pharmacovigilance & Drug Safety with Wipro ltd.
- PG Diploma in Pharmaceutical Analytics with C-DAC, Kolkata.
- BSc course in Digital Health & Technology

University Committee Members:
- Member, Academic Council, MAKAUT,WB
- Phd committee, Pharmacy MAKAUT,WB
- Member, Digital Health Care Technology, MAKAUT,WB
- Convenor, Food Task Force Committee, MAKAUT,WB
- Member, IIPC, MAKAUT,WB
- Member, Institution Innovation Cell (IIC), MAKAUT,WB
- Member, Ekta Incubation Center, MAKAUT,WB
- Member, Board of Studies (BOS)-Pharmacy, MAKAUT,WB

Mou/Collaboartion:

MOU with Wipro on Pharmacovigilnce & Drug Safety (under process)**.**

Academic & Research Collaboration:

- University of Florida, USA
- University of south florida, USA
- University of Louisville, USA
- University Texas, Austin, USA
- Dubai College of Pharmacy, UAE
- Jadavpur University, Kolkata, India
- CDRI, Kolkata, India
- Indian Institute of Chemical Biology
- BITS Pilani, India

Editorial Board Member:

1. Journal of Frontiers in Pharmacology
2. American Journal of Anaesthesia & Clinical Research
3. Journal of Research in Pharmacy & Health Sciences
4. Innosc Theranostics and Pharmacological Sciences (ITPS)
5. Albert Science Int. Organization (ASIO)
6. Scirea Journal of Pharmacy
7. Global Journal of Science, Society and Technology

Reviewer Of Journal:

- Journal of Frontier's Pharmacology
- The International Journal of Polymeric Materials and Polymeric Biomaterials
- Informatics in Medicine Unlocked
- Drug, Healthcare and Patient safety
- CPQ Microbiology
- International Journal of Food and Nutrition Sciences
- Bio-byword Scientific Publishing Ltd
- Iranian Journal of Pharmaceutical Sciences
- Plant Cell Biotechnology & Molecular Biology
- Journal of Applied Oral Science
- Lipid Insights
- Journal of Pharmacy & Pharmacology

Nominee & Advisor:

- Central Govt Nominee, CPCSEA, New Delhi,
- NAAC Assessor, Govt of India

> Research Advisor of International Institute of Innovation & Technology (I3T) in collaboration with John Hopkins University, USA.

Professional Membership

> Member of American Association of Pharmaceutical Scientists (AAPS) [ID: 237994].
> Member of American Association of Immunologists (AII) [ID: 00237561].
> Member of American Society for Microbiology (ASM)[ID: 57379596].
> Member of American Medical Writer's Association (AMWA) [ID: 45831].
> Life time member of Indian Association of Pharmaceutical Scientists & Technologists (IAPST)[ID: LM-1103].
> Life Time Member of Indian Pharmaceutical Association (IPA) [ID: BEN/LM-0489].
> LifeTime Member of Association of Pharmaceutical Teachers of India (APTI) [WB/LM-148].

Prof (Dr.) Jayanta Chattopadhyay

Adjunct Professor

Qualification: Phds

Seminar/Webinar Organised:
1. Road to IT -Enabled Future Pharma Industry, Feb 23 ,2021 To Feb,28 ,2021

Research Paper Published:

> Ayon Dutta and Jayanta Chattopadhyay, Formulation, Development and Optimisation of Alprazolam 0.5 mg Sustained Release Tablet With 12 hrs Release Profile International Journal Of Pharmaceutical ,Chemical and Biological Sciences, IJPC 2020,10(1),20-29

PhD Guided: One awarded PhD from MAKAUT/One is pursuing PhD

Courses Designed: Plan Submitted To Makaut

Patent/IPR Generated: Metaxalone Polymorphs Us Patent: Us 7750165 B2 Jayanta Chattopadhyay *et .Al*

Consultancy Extended: Advised a couple of Pharma Houses

Dr Tapas Kumar Pal

Adjunct Professor

Qualification: Phd

Seminar/Webinar organized/participated in 2020-2021: 08(Eight) nos.
- "Present status of Food processing Industries on West Bengal", Organized by MAKAUT on 27 January, 2021
- "7th International day of Yoga – 2021" organized by MAKAUT on 21 June, 2021
- "Simple tool and Techniques for Preparation of Digital Content" Organized by MAKAUT on 24 April, 2021
- "Update on Covid 19 Vaccination" Organized by MAKAUT on 18 January, 2021
- "Inauguration The Internet TV of MAKAUT" Organized by MAKAUT on 8 June, 2021
- "Covid 19 Vaccination: Myths and Facts" Organized by MAKAUT on 6 June, 2021
- "Preach What you practice"-Session – I (Episode-III), Organized by MAKAUT on 26 June, 2021
- "Iswar Chandra Vidyasagar : Rediscovered", Organized by MAKAUT on 5 December 2020
- Sorrow-Depression-Joy - "Key to achieving Bliss – Session-2" Organized by MAKAUT on 5 May, 2021
- Sorrow-Depression-Joy - "Key to achieving Bliss – Session-9" Organized by MAKAUT on 24 June, 2021
- "Akshoy Kumar Dutta – Pioneer in Science education in Vernacular" Organized by MAKAUT on 12 December 2020

Workshop organized/participated in 2020-2021: 04(Four) nos.
I) On line 5-day FDP program on "Road to IT-Enabled Future Pharma Industry" Organized by MAKAUT during 23 February to 28 February, 2021
II) "Global Regulatory Outlook for Drug Approval: Fitting the Jigsaw Pieces" Organized by School of Pharmacy, RK University on 27 & 28 February, 2021 on virtual platform.
III) "The International education & skill Summit – TIESS Virtual 2021" From 27th to 30th January, 2021
IV) On line 5-day FDP program on "Application of AI & Machine earning in Security" Organized by MAKAUT during 12 October to 16 October, 2020.

Dr. Kazi Asraf Ali

Assistant Professor

Qualification: Phd

Seminar/Webinar organized/participated in 2020-2021:
1. Completed Swayam-NAPTEL course: Current regulatory requirements for conducting clinical trials in India for investigational new drug/new drug (Version 2.0)
2. FDP of AICTE on Universal Human Values
3. FDP on " ROAD TO IT-ENABLED FUTURE PHARMA INDUSTRY "
4. 7TH International day of Yoga – 2021, organized by MAKAUT on 21 June, 2021
5. Simple tool and Techniques for Preparation of Digital Content, Organized by MAKAUT on 24 April, 2021
6. Inauguration The Internet TV of MAKAUT- Organized by MAKAUT on 8 June, 2021
7. Iswar Chandra Vidyasagar : Rediscovered, Organized by MAKAUT on 5 December, 2020

Workshop organized/participated in 2020-2021:
1. Completed STTP on "Hands on training on Art of writing Technical Paper"
2. Completed "Virtual National Workshop on Sponsored Research Projects(Opportunities, Procedures & Practices).

Research Papers Published in 2020-2021:
- Guha A, Shaharyar MA, **Ali KA**, Roy SK, Kuotsu K. Smart and intelligent stimuli responsive materials: an innovative step in drug delivery system. Current Biochemical Engineering. 2020;6(1):41-52.

Books/Book Chapter Published in 2020-2021:
- Tailor-made cyclodextrin based nanomaterials as drug carriers. Tailor-made and functionalized biopolymer system. ELSEVIER, Academic Press. 2021.

- **Ali KA**, Roy PK, Hossain CM, Dutta D, Vichare R, Biswal MR. Starch-based nanomaterials in drug delivery applications. In Biopolymer-Based Nanomaterials in Drug Delivery and Biomedical Applications 2021 Jan 1 (pp. 31-56). Academic Press. Elsevier.

- Vichare R, Hossain CM, **Ali KA**, Dutta D, Sneed K, Biswal MR. Collagen-based nanomaterials in drug delivery and biomedical applications. InBiopolymer-Based Nanomaterials in Drug Delivery and Biomedical Applications 2021 Jan 1 (pp. 427-445). Academic Press. Elsevier.

- Hossain CM, Dutta D, Vichare R, Biswal MR, **Ali KA**, Chakraborty P. Silk protein-based nanomaterials in drug delivery and biomedical applications. InBiopolymer-Based Nanomaterials in Drug Delivery and Biomedical Applications 2021 Jan 1 (pp. 447-463). Academic Press. Elsevier.

M. Pharm. Guided: Awarded- 12, Ongoing-04

Courses designed: Under planning

Professional Activities: Involvement of activity such as NAAC, PCI, AICTE, Exam co-ordination, Class co-ordination etc

Any other information:
- Ongoing Swayam-NAPTEL course: Current regulatory requirements for conducting clinical trials in India for investigational new drug/new drug (Version 3.0)
- Ongoing eDX-MIT course: Using python for Research

Dr. Moitreyee Chattopadhyay

Assistant Professor

Qualification : Phd

Seminar/Webinar organized/participated in 2020-2021:
- Completed FDP of AICTE on Universal Human Values
- Completed FDP on " ROAD TO IT-ENABLED FUTURE PHARMA INDUSTRY "

Workshop organized/participated in 2020-2021:
- Completed STTP on "Hands on training on Art of writing Technical Paper"

Research Papers Published in 2020-2021:
Contaminated Rice, a silent psychopharmacological killer?- A biomolecular landscape and possible solution" - Pharma Middle East Virtual Congress DEC 2020

Dr. Sandipan Dasgupta

Assistant Professor

Qualification : Phd

Seminar/Webinar organized/participated in 2020-2021:

1.   Patent Prosecution challenges and strategies, conducted by the frontiers legal and turnip innovation, 25th July 2020
2.   Online 5days faculty development Programme, ''Road to IT-ENABLED future Pharma Industry'', 23RD to 28th Feb. 2021, Organized by Dept. of science and Tech., MAKAUT, WB

Workshop organized/participated in 2020-2021:
1.   Online workshop on Simple tools and techniques for preparation of digital content, 24th April 2021, Organized by MAKAUT, WB
2.   6 Day STTP, on Art of writing technical paper, 1st to 6th June 2021, Organized by MAKAUT, WB

Research Papers Published in 2020-2021:
   1. Antioxidants as a target in chronic obstructive pulmonary Disease - a review, Accepted, IJBPAS, October, 2021, 10(10), ISSN: 2277–4998,
   2. Cannabinoid receptors: A potential target for osteoporosis pain, Volume 13 Issue 3(Jul-Sep) 2021
   3. 'LAMININ DERIVED PEPTIDES: A PROMISING AND TISSUE-SPECIFIC APPROACH' Vol. 13, Issue 3; March 2022 Issue of International Journal of Pharmaceutical Sciences and Research.

MoU/Collaboration in 2020-2021: Involved in the follow up activity of status of MoU on Pharmacovigilance with Wipro in Higher education Dept, as directed by HoD (In process)
PhD Guided: 01
Professional Activities: Training and Placement activities, Student career counselling, Prepared Proposal for Animal house facility as per CPCSEA, Prepared proposal for latest IT related skill require to developed by the Students of Pharmacy, Preparation of departmental website contents, Prepared format for Placement Brochure, Career guidance for students, ERP Training, Documentation, Application for AICTE, PCI, NAAC/NBA, Installation of Instruments in Lab., Prepared proposal for detecting of Fake medicines,

Any other information: Selected for the training for NOMINEE of CPCSEA (Committee for the Purpose of Control and Supervision of Experiments on Animals) dated 5th Feb. 2021, Life Member of APTI (ASSOCIATION OF PHARMACEUTICAL TEACHERS OF INDIA)

Mr. Dipesh Chakraborty
Assistant Professor

Seminar/Webinar organized/participated in 2020-2021:
1. "Future Prospect of Pharmacovigilance & Drug Safety" by the Department of Pharmaceutical Science and Technology, MAKAUT, WB.
2. Webinar on Understanding practice School and it's concept in UG Pharmacy Education organized by PCI, New Delhi in Association with RGUHS, Bengaluru and JSS academy of Higher Education and Research.

Workshop organized/participated in 2020-2021: 5 Day (23rd-28th Feb,2021) online faculty development program on ROAD TO IT-ENABLED FUTURE PHARMA INDUSTRY, organized by Department of Pharmaceutical Science and Technology, MAKAUT, WB.

Professional Activities: Teaching, evaluation, mentoring students.

Any other information:
Guiding PG research projects of three students.

Department of Food Science and Technology
Head of the Department: Prof. Sebak Ranjan Roy

Introduction of the Department/Centre: 2019
Courses Offered:

Sl no	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1	B.Sc. (H) Food Science & Technology	NA	3	30	Higher Secondary (Science) with Physics, Chemistry, Mathematics and Biology or Food & Nutrition with minimum 60% marks.	CET

| 2 | M.Sc. Food Science & Technology | NA | 2 | 30 | B.Sc. in Food and Nutrition /B.Sc.in Food Science/ Bachelor's degree in any other branch of Science and Technology. | CET |

List of Faculty:

Sl No	Name of the Faculty Member	Present Designation	Area of Specialisation/Research Interest
1	Prof. Sebak Ranjan Roy	Professor	Food Processing and Preservation, Low Cost Food Product Development, Food Fermentation, Waste Treatment, Food Packaging, Food Biotechnology, Bioprocess Engineering, etc.
2	Dr. Sonia Kundu	Assistant Professor	Chemistry, Nutritional Biochemistry, Biopolymer Derivative Synthesis, Nanotechnology in Food Packaging Applications, etc.
3	Dr. Niladri Chakraborty	Assistant Professor	Food Processing, Food Preservation, Food Quality, New Food Product Development, Process Optimization, Energy Intensification, etc.
4	Dr. Anju Paul	Assistant Professor	Application of enzymes in food, Food product development, Effect of food on human nutrition, Presence of toxic substances in food, Food adulteration, Antioxidants in food, Antimicrobial activity of different fruits and vegetables, Analysis of food or area of related fields.

Number of Students placed in 2020-21: One out of two students of M.Sc. 2nd Year

Field Projects/Internship undertaken by the students:

Roll No.	Name of Student	Project Title	Industry Training
30088719001	Sk Abdur Raunak	Processing of Vannamei Shrimp (LitopenaeusVannamei)	Processing of seafood (wild and farm raised shrimps and prawns) at NRSF Pvt. Ltd. Unit no. 10, Benfish Complex Budherhat Road, Panch Sayar, Kolkata, West Bengal
30088719003	Sayani Saha	Manufacture of Soya Milk	Laboratory Testing of Major Ingredients like Flour/Sugar/RBD oil for Biscuit Industries at G.L. & Son's (m&p) Pvt. Ltd, Chinsurah, West Bengal

Linkage with Institution/Industries: In process

List of new courses started in 2020-21:

Sl. No.	Courses started in 2020-21	UG/PG/certificate
1	B.Sc. (H) Food Science & Technology	UG

Whether any examination reform has been implemented during the year: Yes, Online Mode through ERP

Futuristic Plans:
1. Post Graduate Diploma in Industrial Fermentation Technology
2. Post Graduate Diploma in Bakery Science & Technology
3. MBA in Food & Agribusiness
4. Various Short-term courses

New Proposed Programme in 2021-22:

Sl. No.	Course	UG/PG/certificate
1	B.Sc. Food Science & Nutrition	UG
2	M.Sc. Food Science & Nutrition	PG

Workshop/Seminar/Webinar/Other events in 2021-22:
1. Webinars
2. STTP
3. FDP

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4. EDP

Faculty Profile

Dr. Sebak Ranjan Roy

Faculty (C) & HoD

Qualifications: Mtech(Gold Medalist), Phd (ChE)

Seminar/Webinar organized/participated in 2020-21:

Sl. No.	Event Type	No. of Events	Remarks
1	Webinars	05	Participated
2	FDP	03	Participated
3	Workshops	05	Participated
4	Webinars	10	Organized

Invited Lectures in 2020-21: Online summer internship programme (OSIP-2020) on **Biochemical and Biomedical Engineering for** students of chemical engineering and B.Sc. Bio Technology / Micro Biology / Bio-Chemistry from across the country from around 150 institutes/universities including IITs/NIT.

Books/Book Chapter Published:

1. Book chapter 1 of "Recent Concepts in Chemical Process Technology and Equipment Design'': *Cellulose To Glucose* forwarded to the pre-press team for their review. This can take up to 3 weeks to complete.

2. **Edible film on Food with Smart Incorporation of Health Friendly Supplements** Ivi Chakraborty, Sebak Ranjan Roy, Tanima Bhattacharya and Jayanta Saha.

   Book chapter 1 of Nanotechnology in Intelligent Food Packaging: Nanotechnology for the advancement in functional food research.

   Abstract has been accepted by "Scrivener Publishing LLC, USA", business partner of Wiley. The Book chapter has been submitted by 25th March, 2021.

3. **Advancement of nanotechnology in developing functional foods Animesh Naskar[1], Sebak Ranjan Roy[2*], [4]Ivi Chakraborty, [4]Tanima Bhattacharya.**

   Book chapter 1 of Nanotechnology in Intelligent Food Packaging: Nanotechnology for the advancement in functional food research.

   Abstract has been accepted by "Scrivener Publishing LLC, USA", business partner of Wiley. The Book chapter has been submitted by 25th March, 2021.

4. Basic in Fermentation Technology: *In Process*
    The Publisher of the book is Cambridge Scholars Publishing (UK).
5. Basic in Food processing & Nutrition: *In Process*
    The Publisher of the book is Cambridge Scholars Publishing (UK).

Research Projects: 17 Industrial Projects
MoU/Collaboration: In process
Refresher/Orientation Courses: 3
PhD Guided: Yet to do
Courses designed:

1. M.Sc. Food Science & Technology (Modification)
2. B.Sc. Food Science & Technology (CBCS)
3. B.Sc. Food Science & Nutrition (CBCS)
4. M.Sc. Food Science & Nutrition
5. Post Graduate Diploma in Industrial Fermentation Technology
6. Post Graduate Diploma in Bakery Science & Technology
7. MBA in Food & Agribusiness
8. Various Short-term courses

Patents/IPR Generated: "A Baffle Plate Fermentor for Manufacturing Ethanol from Glucose and A Process Involving The Same" has been granted on 08/12/2016 (Patent No. 278004)
Consultancy Extended: 5 projects handled/assistant or as Associate Consultant or Consultant
Professional Activities: Associated with number of Philanthropic organization in different capacity

Dr. Sonia Kundu
Assistant Professor (C)

Qualification: Phd
Seminar/Webinar organized/participated in 2020-21:

Sl. No.	Event Type	No. of Events	Remarks
1	Webinars	55	Participated
2	FDP	07	Participated
3	Workshops	01	Participated
4	Webinars	03	Organized

Research Papers Published:

1. Aalok Basu, **Sonia Kundu**, Aatrayee Das, Chitra Basu, Sagar Bhayye, Suvadra Das and Arup Mukherjee, "Polyphenol capping on gold nanosurface modulates human serum albumin fibrillation", ***Materials Advances (I.F. pending)***, **2020**, <u>DOI: 10.1039/D0MA00274G.</u>

2. Aatrayee Das, **Sonia Kundu**, Sumanta Kumar Ghosh, Aalok Basu, Mradu Gupta and Arup Mukherjee, "Guar gum cinnamate ouzo nanoparticles for bacterial contact killing in water environment", ***Carbohydrate Research (I.F. 2.104)***, **2020**, <u>https://doi.org/10.1016/j.carres.2020.107983</u>.

3. Aalok Basu, Sujay Guti, **Sonia Kundu,** Aatrayee Das, Suvadra Das and Arup Mukherjee, "Oral andrographolide nanocrystals protect liver from paracetamol induced injury in mice", ***Journal of Drug Delivery Science and Technology (I.F. 3.981)***, **2020**, 55, 101406.

Courses designed: (1) B.Sc. Food Science & Technology (CBCS) (2) B.Sc. Food Science & Nutrition (CBCS)(3) M.Sc. Food Science & Nutrition

Dr. Niladri Chakraborty
Assistant Professor (C)

Qualification: Phd

Seminar/Webinar organized/participated in 2020-21:

Sl. No.	Event Type	No. of Events	Remarks
1	Webinars	10	Participated
2	FDP	01	Participated
3	Workshops	02	Participated
4	Webinars	01	Organized

Invited Lectures in 2020-21: One (01).Research Papers Published:

1. Chakraborty, N., Chakraborty, R., & Saha, A. K. (2020). Fortified and freeze-dried kiwi fruit (*Actinidia deliciosa*): quality and sensory assessment. *Brazilian Journal of Food Technology*.Vol. 23, e2019077.https:// doi.org/ 10.1590/ 1981-6723.07719.

2. Chakraborty N, Saha, A. K. (2020). Fish based fortified foods-A glimpse towards future potential. *Open access Journal of Biomedical Science*. Vol. 2 (4): 458-460. DOI: 10. 38125/OAJBS.000195.

Books/Book Chapter Published:

1. Chakraborty, N., Chakraborty, R., & Saha, A. K. (2020). Preservation of Food by Drying and Freezing Individually and / or Combinedly. In *Recent Innovations in Food and nutritional Sciences*. Levant Books Publication, Kolkata. ISBN: 978-93-88069-61-8.

Courses designed: [1] B.Sc. Food Science & Technology (CBCS), [2] B.Sc. Food Science & Nutrition (CBCS), [3] M.Sc. Food Science & Nutrition.

Dr. Anju Paul

Assistant Professor (C)
Qualification: Phd
Seminar/Webinar organized/participated in 2020-21:

Sl. No.	Event Type	No. of Events	Remarks
1	Webinars	5	Participated

Courses designed: Contributed in designing of B.Sc and M.Sc. Food Science & Nutrition

The School of Natural and Applied and Social Science

Dr Sukhendu Samajdar

Director

Introduction: The School of Natural & Applied Sciences serves to build the cornerstones of knowledge for the other Schools of the University, namely Engineering, Computing, and Management Sciences. In AY 2019-20 it is offering 6 programs at PG & UG levels and plans to double it next year.

The School is proud of the members of its faculty, all but one or two holding doctoral degrees. Some of them are notably accomplished, such as one Nehru-Cambridge Fellow and one Humboldt Fellow. In addition to teaching with modern pedagogical tools & techniques, the faculty of the School is actively engaged in state-of-the-art Research & Development projects. It has successfully attracted external funding such as DST grants.

In the last five months, the School has organized 15 Webinars, several Workshops and online Student Symposia; and developed digital content for online delivery.

Applied Science, Forensic Science, and Materials Science & Technology are the constituent Departments of the School

ACADEM FOCUS AREA

Computational Applied Science
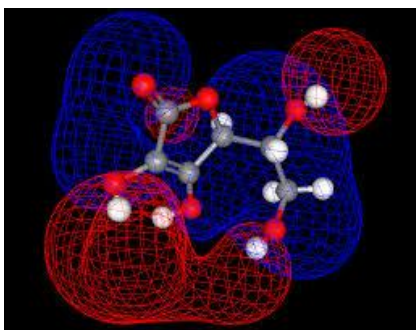
Nano-scale Investigation

- ✓ One Alexander von Humboldt Fellow.
- ✓ One Nehru-Cambridge Fellow.
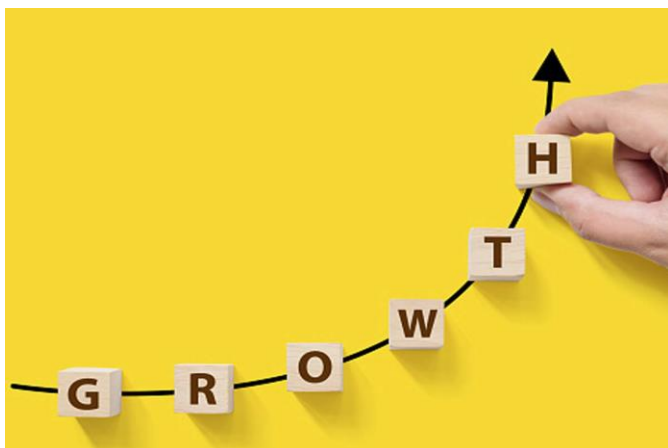- ✓ Doctorates from The University of Michigan, Ann Arbor; IISc, Bangalore and the like.
- ✓ Multiple DST Grants.
- ✓ Publication in high-IF Journals.
- ✓ Office Bearers in Professional Societies.

- ✓ 1000+ Hours of Online Teaching-Learning
- ✓ Hyperlinked Course Pack Preparation by Teachers
- ✓ 10s of Hours of Online Assessment
- ✓ Pilot Testing '*Peer Evaluation*' by Students
- ✓ 1000+ MCQ Preparation
- ✓ 20+ MOOCS Certificates by Faculty Members
- ✓ 10/9 MOOCS Certificates by Students (MST only)
- ✓ 15+ Online Events (Webinar, Symposium, etc)
- ✓ 30+ Virtual Lab Sessions
- ✓ 3+ Interactive Simulation Sessions Online
- ✓ 4+ Online Presentation Sessions by Students
- ✓ Weekly Participation by Students in SLS
- ✓ Increasing Student & Faculty Engagement

Department of Materials Science & Technology
Head of the Department: Prof. (Dr.) Sukhendu Samajdar

Introduction of the Department/Centre: July 2018

Courses Offered:

Sl no	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1	BSc in Materials Science	UGC	3 years	30	10+2 with proficiency in English and science or equivalent	valid CET rank after qualification

2	MSc in Materials Science	UGC	2 years	30	3-year Bachelor's degree from a UGC-recognized university majoring in chemical/ physical/ mathematical sciences or equivalent	valid CET rank after qualification
3	MTech in Materials Science & Technology	AICTE	2 years	30	4-year Bachelor's degree from a UGC-recognized university or institute majoring in relevant engineering/ technology or equivalent. OR 2-year Master's degree from a UGC-recognized university majoring in chemical/ physical/ mathematical sciences or equivalent	valid PGET rank after qualification

List of Faculty:

Sl No	Name of the Faculty Member	Present Designation	Area of Specialization/Research

			Interest
1	Prof. (Dr.) Sukhendu Samajdar	Professor & Director, School of Natural, Applied & Social Sciences Head, Department of Materials Science & Technology Professor-in-Charge, Language Laboratory	Materials informatics, creative pedagogy, incubation & start-up as well as the role of humanities in science & technology
2	Dr. Anirban Roy	Assistant Professor	Chemical Engineering, Material Science & Technology, Environmental Science, Nanomaterial Synthesis, Characterization & Application
3	Ms. Monalisa Char	Assistant Professor	Advanced Materials Processing and Characterization. Different materials joining technologies and Structure Property Correlation studies, Control System, Materials modelling and simulations

Number of Students placed in 2020-21: 01

Linkage with Institution/Industries:

Collaboration with

- Academic institutes IIEST Shibpur; Jadavpur University; GCECT Kolkata, JBNSTS Kolkata
- Research institutes like CSIR-CGCRI Kolkata, NIT Durgapur and CSIR-NML Jamshedpur
- Professional institutes like The Institution of Engineers (India), Indian Plastic Federation, Indian Plastic Institute, Material Research Society of India, etc.
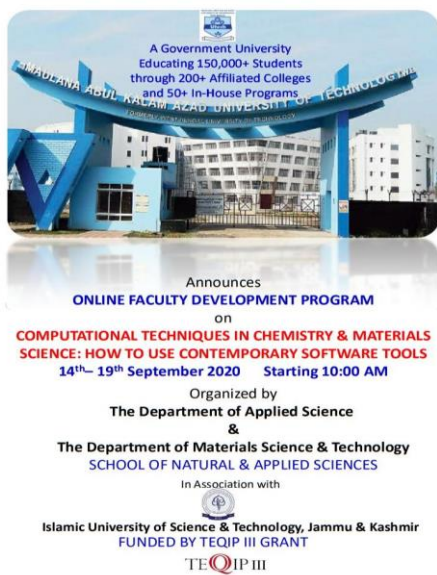
Flyers of significant activities in 2020-21 : Webinars
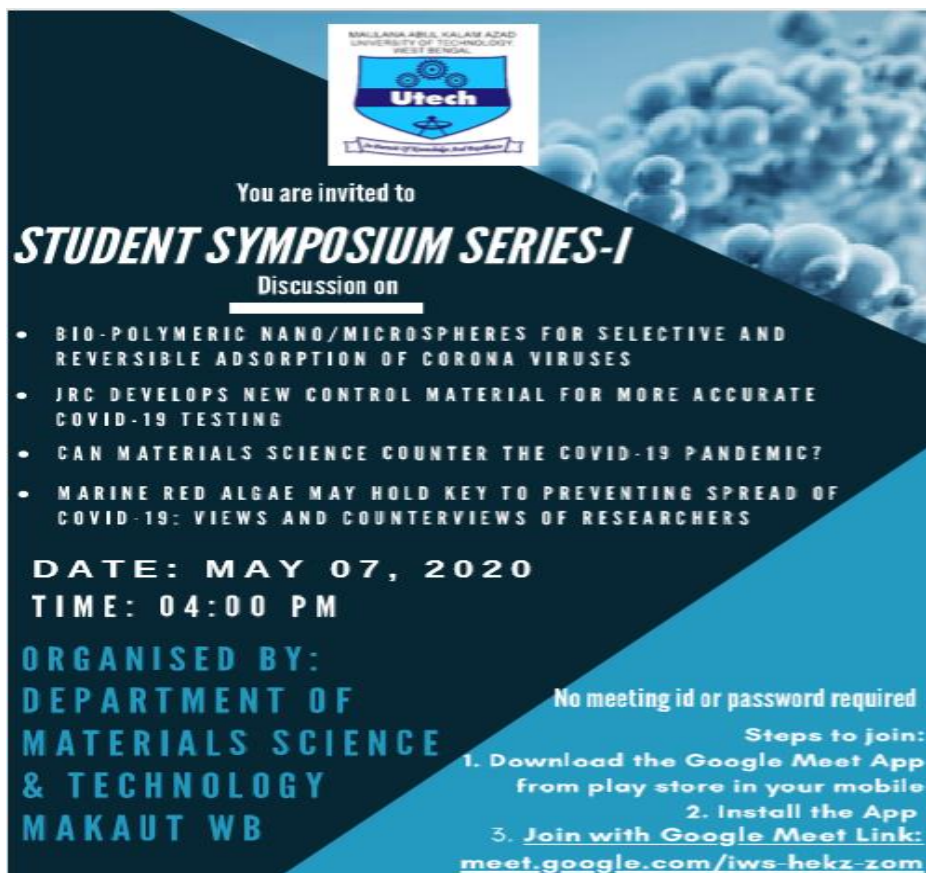
Faculty Profile

Prof. (Dr.) Sukhendu Samajdar
Professor & Director, School of Natural, Applied & Social Sciences
Head, Department of Materials Science & Technology
Professor-in-Charge, Language Laboratory

Professor Samajdar has about 25 years of academic and 10 years of industry/ corporate experience, of which 20 years have been in the United States of Am. Upon earning his PhD from the University of Michigan, Ann Arbor, he was appointed directly as an Assistant Professor at a premier university in Ohio, USA. In that capacity he engaged in collaborative research in Materials Science with a group at MIT led by Prof John B van der Sande, the then Dean of Engineering at MIT. Professor Samajdar is well published in journals like Applied Physics Letters, the Journal of Materials Science, etc. He has supervised over a hundred postgraduate students for their thesis and dissertation work and made presentations at numerous conferences in all continents.

After his tenure in academia, Dr Samajdar had a stint in the corporate sector of the US, notably at Toyota, USA and Biomet, USA.

A BE from Jadavpur University and an ME (1st class 1st, Gold medallist) from the Indian Institute of Science, Bangalore, Dr. Sukhendu Samajdar is originally trained as a materials engineer. However, at present his interests are more versatile than specialized, including materials informatics, creative pedagogy, incubation & start-up as well as the role of humanities in science & technology.

He was a recipient of the prestigious Nehru-Cambridge Scholarship and was recognized by the Editor-in-Chief of the Journal of Materials Science for "thoughtful contributions" to that journal.

Prior to joining MAKAUT, Prof Sukhendu Samaddar served as the founding Pro Vice Chancellor of Kaziranga University in Jorhat, Assam.

Seminar/Webinar organized/participated in 2020-21:

- The Talk Show

- National Statistics Day

- Writing For Results: How to craft effective emails

- Smart Nanomaterials for Applications in Applied Sciences

- A Skill Set Worth a Thousand Words: Developing Communication Skills that Speak in Your Favour

- Materials Informatics - A New Paradigm for Materials Design

- Creating the best impression: An insight on how to face personal interviews

- Engineering Skills for the Year 2020 and Beyond

- Materials Science in Context of Covid 19

Workshop organized/participated in 2020-21:
- The Craft of Scientific & Technical Writing"

Dr Anirban Roy
Assistant Professor, Department of Materials Science & Technology
Webinar organized in 2020-21: Promotional/Interactive webinar for different courses running under the department of Materials Science & Technology with a name of "Interactive Session on B.Sc & M.Sc Material Science (MAKAUT, WB)"

Qualifications: Phd

Webinar participated:
1. Celebration National Statistics Day: Birth Anniversary of P. C. Mahalanobis on 29.06.2021
2. Online Teaching and Learning on 28.06.2021
3. Data Analytics & Data Science – Why it matters in almost everything on 26.06.2021
4. Bengal has got its own MOOC platform on 22.06.2021
5. Environmental Justice – Is it a doomed Indian fantasy? On 20.06.2021
6. Reimagining Education on 18.06.2021
7. COVID-19 vaccination: Myths and Facts on 06.06.2021
8. Hands on Training on Art of writing Technical Paper on 01.06.2021- 06.06.2021

Research Papers Published:
Anirban Roy, Saikat Maitra, Sampa Chakrabarti, "Simultaneous solar photo-degradation of PVC-Fe-doped-ZnO nanocomposite flakes and Methylene Blue dye in water" in Journal of Environmental Engineering and Landscape Management (Accepted)

Books/Book Chapter Published:
Parbatee Nag, Aniruddha Mukhopadhyay, Amrita Debnath, Anirban Roy, and Sampa Chakrabarti, Degradable Plastic Composite Film—A Comparison Between Photocatalytic and Biodegradation, In: Ramkrishna D., Sengupta S., Dey Bandyopadhyay S., Ghosh A. (Eds) Advances in Bioprocess Engineering and Technology, Lecture Notes in Bioengineering, Springer, Singapore. (https://doi.org/10.1007/978-981-15-7409-2_25)

Courses designed:
For BSc
1. Materials Chemistry (BSc 2nd sem)
2. Structure of Materials (BSc 3rd sem)

For MTech
1. Introduction to Material Science and Technology (MTech 1st sem)
2. Introduction to Artificial Intelligence (MTech 2nd sem) (partially)

3. Material and Energy Balance (MTech 3rd sem)
4. Waste to Energy Conversion (MTech 4th sem)

Professional Activities:
1. Organized departmental promotional webinar
2. Participated different webinars and workshops
3. Guided the MTech students in final year project

Monalisa Char
Assistant Professor
Laboratory (UG/PG/Research students) and infrastructural development Coordinator of Department of Materials Science and Technology

Qualifications: Mtech (OR), Mtech(AMST), Phd (pursuing)

Webinars Attended:
As a Moderator & Organising Member
(i) Moderator: "*Materials Informatics: The Emerging Paradigm of Materials Design*" on 16th July 2020

As a participant
(i)Transforming Science Education and Research through Computation: Intensive Tools of Learning, on 20th July 2020
(ii) IEEE Xplore: Search vs. Research, organised by MAKAUT WB on 30th July 2020
(iii) International Webinar series on 2D Materials & Devices, organised by Centre of Excellence in Advanced Materials, NIT Durgapur during 15-16 July 2020
(iv) Wettability-Engineering: A skin depth approach of solving the Energy Water Nexus held on 22nd July 2020, organised by JBNSTS Kolkata
(v) Bengal Education Leaders' Summit with education minister Partha Chatterjee: Is Higher Education in Bengal today geared for Careers of Tomorrow? organised by ABP Education on 12th August 2020
(vi) Essentials of Electric Vehicles organised by Sri Eshwar College of Engineering, Coimbatore on 19th August 2020

Workshop organized/participated in 2020-21:
(i) Moderator: Faculty Development Programme on "*Computational Techniques in Chemistry & Materials Science: How to use Contemporary Software Tools*", 14th-19th September, 2020.

(ii) Moderator and Organizing Committee member: 5 days Faculty Development Program on "*The Art & Craft of Scientific & Technical Writing: from A to (almost) Z*" held during 2-6 Nov, 2020

Research Papers Published:

1. Sumantra Das, **Monalisa Char**[*], Study of electrical properties of alternate layers of SN100C and Tin and changes observed with aging time, Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2021.01.814, **2021**

Conferences attended:

1. Participated in Young Scientist Conference as a part of India International Science Festival 2020 (IISF 2020), DST-Govt. of India held from 22nd Dec to 25th Dec **2020**

Courses designed:

- Course coordinator: UG/PG courses
- Designed the B. Sc-Materials Science syllabus as per CBCS

Students guided

1. Guided B. Sc students in Mini Project/s on Materials Around Us (Microscopic and Macroscopic properties of materials around us
2. Utilizing Virtual Labs (MHRD), Online Labs, PhET Simulation etc. for performing the laboratory sessions
3. "nptel Special lecture series" report writing by the students on relevant topics on Materials Science & Technology and upcoming areas

Teaching: _B. Sc (Materials Science)_

1. Introduction to Materials (BMS 101)
2. Processing of Bulk Materials (BMS 403)
3. Lab: BMS191, BMS192, BMS292
   M. Tech (Materials Science & Technology)
4. Mechanical Behavior of Materials (MST 102)
5. Nanostructures & Nanomaterials (MST 201)
6. Introduction to Artificial Intelligence (MST 204A)
7. Lab: MST191, MST291
   M. Tech-Computer Science and Engineering & Software Engineering
8. Composite Materials (PGCS 302E & PGSE 302E)

Department of Applied Science
Head of the Department: Prof. Radhabaallabh Bhar

Introduction of the Department: Department of Applied Science is functioning under the umbrella of the School of Natural, Applied and Social Sciences. The Department mainly served as a supportive teaching to the core Engineering and Science Departments at UG & PG level with the aim to develop a strong base in the areas of Science & Engineering Mathematics, Science & Engineering Chemistry and Science & Engineering Physics. Apart from the support to others Department initiated few programs starting from the academic session 2019-20.

All the faculty members of the Department are also involved in different research projects in the University or in collaboration with other Institutes/Universities along with teaching and other academic activities.

Program introduced during 2019-20: 2 yrs (four semester) MSc in Applied Chemistry
Following programs introduced from 2020 – 21:

➢ 2 yrs (four semester) MSc in Applied Statistics & Analytics
➢ 3 yrs (six semester) BSc with Mathematics & Computer Applications

From the next academic session few more courses will be added with a motive to function it as a full fledged core Department.

Courses Offered:

Sl no	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1.	M.Sc. in Applied Chemistry	UGC	2 years	30	B.Sc. with Chemistry	CET
2.	M.Sc. in Applied Statistics and Analytics	UGC	2 years	30	B.Sc. with Statistics/ Mathematics	CET
3.	B.Sc. in Mathematics and Computer Applications	UGC	3 years	30		CET

List of Faculty Members:

Sl No	Name of the Faculty Member	Present Designation	Area of Specialization /Research Interest
1.	Dr. Tapas Ghosh	Assistant Professor Stage-I	Organic Chemistry
2.	Dr. Arijit Bag	Assistant Professor Stage-II	Theoretical and Computational Chemistry, Development of Transition Probability Approximated Theories, Development of Quantum Chemistry
3.	Dr. Subhas Chandra Bhattacharya	Adjunct Professor	Bio-Physical Chemistry, Photochemistry, Surface Chemistry, Nanomaterials
4.	Dr. Debashree Manna	DST INSPIRE Faculty	Theoretical and Computational Chemistry
5.	Dr. Jony Saha	DST INSPIRE Faculty	Materials chemistry
6.	Prof Prasanta Narayan Dutta	Faculty (c)	Mathematics

7.	Dr Atreyee Biswas	Assistant Professor	Mathematics: Cosmology, Quantum Mechanics, Fuzzy set and Internet of Things
8.	Dr Sankar Prasad Mondal	Assistant Professor	Mathematics : operations research, differential equation, fuzzy sets, mathematical biology, fuzzy differential equation, Soft Computing, Artificial Indigence, Optimization theory
9.	Ms Anwesha Sengupta	Faculty(c)	Mathematics
10.	Dr Hiranmoy Mondal	Assistant Professor	Mathematics
11.	Dr Banashree Sen	Assistant Professor	Mathematics
12.	Mr Taranga Mukherjee	Faculty(c)	Statistics
13.	Mr Bratin Das	Faculty (c)	Statistics
14.	Dr Prabuddha Sanyal	Associate Professor	Theoretical Condensed Matter Physics
15.	Prof Radhaballabh Bhar	Adjunct Faculty & HoD	Physics/Instrumentation/Electronics/Synthesis of sensors/Mat.Sc./Int.Dis.Subject

List of new courses started in 2020-21: 2 (Two) nos

Sl. No.	Courses started in 2020-21	UG/PG/certificate
1.	M.Sc. in Applied Statistics and Analytics	PG (MSc)
2.	B.Sc. in Mathematics and Computer Applications	UG (BSc)

Whether there is any change in the Curriculum during the year: YES

Whether any examination reform has been implemented during the year: YES

Fellowship received by the faculty members for Advance Studies/Research: Two DST Inspire Faculty of Chemistry joined in the Dept. during the year

Futuristic Plans: New Proposed Programs in 2021-21:

Sl. No.	Course	UG/PG/certificate
1.	2 years M.Sc. Applied Mathematics	PG
2.	3 yrs B.Sc. Statistics	UG

Other plans: Workshop/Seminar/Webinar/Other events in 2021-22**:** Three

Faculty Profile

Dr. Tapas Ghosh
Assistant Professor

Qualifications: PhD
Seminar/Webinar organized/participated in 2020-21: 15 (Participated in 15 National/International   Webinars.)

Workshop organized/participated in 2020-21: Organized One 5 day Faculty Development Program and three National One day Webinars as Program Coordinator
Invited Lectures in 2020-21: Two (2) (In International Webinars)
Research Papers Published: 05
Research Projects: Three (1. SERB-26.95 Lakhs; 2. UGC-10 Lakhs; 3. MAKAUT-01 Lakh)
Refresher/Orientation Courses: 1/1
1. Refresher Course: ARPIT Online Refresher Course in Chemistry for Higher Education.
2. Orientation Course: UGC Sponsored 30th Orientation course (online).

Courses designed: M.Sc. Applied Chemistry program syllabus
Professional Activities: (1) Reviewer to many international/national journals like: Journal of Organic Chemistry, Journal of Materials Chemistry C, Asian Journal of Organic Chemistry, Organic Letters, Journal of Indian Chemical Society. (2) Life member of Humboldt Club Kolkata

Dr. Arijit Bag

Assistant Professor Stage-II

Qualifications: PhD

Seminar/Webinar organized/participated in 2020-21: 2

Invited Lectures in 2020-21: 1

Research Papers Published: 6

Courses designed: 1
Professional Activities: 4
Any other information: Selected as the Editorial Board Member of "Acta Scientific Womens' Health" Journal

Dr. Subhash Chandra Bhattacharya
Adjunct Professor

Qualifications: PhD

Seminar/Webinar/Participated in 2020-21: 4
Research papers published in 2020-21: 3
Books/Book chapter published: Two book chapters on Photochemistry and Spectroscopy in text book of Netaji Subhas Open University (in Press)
Courses designed: M.Sc. courses syllabus and projects of M.Sc students
Professional activities:
(1) Editor of special issue of JICS, published in June 2021.
(2) President of Indian Photobiology Society
(3) Vice president of ISSST.

Dr. Debashree Manna
DST Inspire Faculty

Qualifications: PhD

Research papers published in 2020-21: 04
Professional activities: Teaching and research

Dr. Jony Saha
DST Inspire Faculty

Qualifications: PhD
Research Projects: DST INSPIRE Faculty project; Development of Mn, Fe, Co and Ni based ordered mesoporous metal phosphate materials and their application as catalysts in electrochemical water oxidation (Project amount: 35 lakhs)

Dr. Atreyee Biswas
Assistant Professor

Qualifications: PhD
Seminar/Webinar organized/participated in 2020-21: organized one, Participated two
Workshop organized/participated in 2020-21: organized one, participated two
Research Papers Published: 1
Books/Book Chapter Published: 2
PhD Guided: enrolled one
Courses designed: BSc, Mathematics and Computer Applications
Professional Activities: Teaching, Course coordination

Dr. Sankar Prasad Mondal

Assistant Professor

Qualification: PhD

Seminar/Webinar organized in 2020-21: 2 nos
1. Scientific and Technical Writing, 02.11.2020 to 06.11.2020
2. APPLIED MATHEMATICS SKILLS FOR SCIENCE & ENGINEERING USING CONTEMPORARY SOFTWARE TOOLS, 14.09.2020 to 18.09.2020
Seminar/workshop participated in 2020-21: Seminar 2, Workshop 3
Research Papers Published: 34
Book Chapter Published: 4
Research Projects: ongoing one as detailed below
UGC-BSR Start-up grant for newly recruited faculty at Assistant Professor level in science department (21.01.2020)
Refresher/Orientation Courses completed: 3

PhD Guided:

1 PhD Scholar awarded (as co supervisor, IIEST Shibpur)
1 PhD Scholar submitted (as co supervisor, NIT Agartala)
2 Enrolled (as Supervisor, MAKAUT, W.B)

Anwesha Sengupta

Assistant Professor

Qualifications : M.Sc.

Seminar/Webinar organized/participated in 2020-21: 4 Nos

Webinars	Organized by	Date
1. Corporate lecture Series 2 : Application of Regression &Classification Algorithms in solving business Problems	Dept. of Applied science	12 June,2021
2. Corporate Lecture Series 1 : Application of AI on Finance Domain	Dept. of Applied science	29 May,2021
3. Covid 19 Vaccination Myth & Facts	MAKAUT, WB	6th June, 2021
4. Online Inauguration Program for Digital Library	MAKAUT, WB	21st May,2021

Workshop organized/participated in 2020-21: Attended 6 as detailed below:

Topic	Organized by	Session
1. Data Science & Big Data Analytics	**MAKAUT, WB** in association with Islamic University of Science & Technology, Jammu & Kashmir.	13th Jan-17th Jan,2020
2. 5 days FDP on "Recent advances on Machine Learning & its application"	Organized by **Amity Institute of Technology, Amity University, Kolkata.**	23rd June – 27th June,2020.
3. 5 days FDP on "Advanced Research Techniques".	Organized by **MAKAUT, WB.**	8th August- 23rd August,2020.
4. 6-day National level online workshop on "Programming Essentials for Mathematics	Organized by **CHRIST (Deemed to be University.)**	9th August- 14th August,2020

using Python".		
5. 5 Day FDP on Applied Mathematical Skills for Science & Engineering Using Contemporary Tools (Serving as a Programme Moderator)	Organized by **MAKAUT, WB,** in association with IUST, Jammu & Kashmir.	14th – 18th September, 2020
6. 5-Days FDP on the Art & Craft of Scientific &Technical writing: From A to almost Z	Organized by **MAKAUT, WB,** in association with IUST, Jammu & Kashmir.	2nd -6th November,2020

Research Projects:

Type:	Subject	Duration
Students' project (Serving as a co-guide) (Master's level, M.Sc 1st year student)	Dilemma in acquiring a mobile phone: An exploration & overview with Exploratory Factor Analysis.	Year 2020-21

Courses designed: Preparing Syllabus for B.Sc. in Mathematics with Computer Application, M.Sc. in Applied Statistics & Analytics, M.Sc. in Applied mathematics

Professional Activities:

FDP	Time Duration
NPTEL (Essential Mathematics for Machine Learning)	September,2020-December,2020
Coursera Courses Python Basics Professional English Courses	2020-21

Any other information:

Examination	Year of passing
CSIR-UGC NET	2020 June(November)
SET	2020

Dr Hiranmoy Mondal

Assistant Professor
Qualifications : Phd
Seminar/Webinar organized/participated in 2020-21:
1. 12 Days FDP at Brainware University 20th July to 7th August, 2020.
2. Days FDP at MAKAUT,WB on 14-18th September, 2020

3. Presented a research paper in International conference on emerging trends in Mathematical Sciences and Computing (IEMSC-2021) at Kolkata, India, during 5-7th February, 2021.

Invited Lectures in 2020-21: 4

Research Papers Published:
   (i)   Journal publications: 14 +3 = 17 (in Scopus, SCI, SCIE);
   (ii)   Proceeding publications: 22

MoU/Collaboration: National University of Science and Technology, Zimbabwe; University of KwaZulu Natal, South Africa

Present research activities: Ongoing (Three research students):
   (i) Two- Jadavpur University: (Jointly with Prof. Prabir Kumar Kundu)
   (ii) One- University of KwaZulu Natal (Jointly with Prof. Sicelo Goqo)

Professional Activities: Teaching & Research

Dr. Banashree Sen

Assistant Professor (c)
Qualifications : Phd

Seminar/Webinar organized/participated in 2020-21: Participated in '*Simple Tools & Techniques for preparation of Digital Content*'. *Webinar* for Corporate & Industrial meet arranged weekly from MSASA department.

Courses designed*: BSc in Astrophysics, BSc Applied Mathematics, MSc in Applied Statistics, MSc in Applied Mathematics*

 Professional Activities:

1. Designing Bridge Course by preparing Digital Content.

2. Learning new tools of solving and understanding Mathematics & Statistics.

3. Conducting exam in online mode and Formatting MCQ question bank.

4. Requisition listing for B.Sc in Astrophysics and Promotional activity for MSc Statistics & Mathematics.

Bratin Das
Faculty (Contract)
Qualification: M.Sc
Seminar/Webinar organized/participated in 2020-21: 3
Research Projects: Submitted yet to be published

Courses designed: Probability and Queueing theory for Applied Mathematics, Reliability for Applied Statistics and Analytics

Professional Activities: Arranging corporate lecture series to bridge the gap between Academia and Industry. Also to create job opportunities for the department of Applied Statistics and Analytics

Any other information: Pursuing PhD**.**

Taranga Mukherjee

Faculty

Research Papers Published: 1
Courses designed: 1

Dr. Prabuddha Sanyal
Associate Professor

Qualification: Phd

Workshop organized/participated in 2020-21: Faculty Development Program (FDP) organized from 12th to 16th October, 2020 on 'Current topics and tools of applied physics for science, engineering and technology'.

Dr. Radhaballabh Bhar

Adjunct Faculty and Head of the Dept. of Applied Science

Qualification: Phd

Seminar/Webinar organized in 2020-21: 1

Seminar/ participated in 2020-21: 8

Workshop participated in 2020-21: 2

Invited Lectures in 2020-21: 1

Research Papers Published: 1

Research Projects: Completed one DST Project in May, 2021

PhD Guided: Awarded one

Courses designed: Two

Professional Activities: Engaged in teaching, examinations and related monitoring , question papers, evaluations, research, review of Journal papers, academic administration, new programs in the Department, Plagiarism checking and certification of Ph.D. thesis, in MAKAUT, WB,

Any other information:

1. Members of the following Academic committee:

2. External expert; Departmental Research Committee, Dept. of Physics, University of Gour Banga, Malda

3. External expert; Departmental Research Committee, Dept. of Engineering and Technologies, Kalyani University

4. Member of the Academic Council, Haldia Institute of Technology

5. Council member, Centre for Rural and Cryogenic Technologies, DST, Govt. of West Bengal, JU campus**.**

Department of Forensic Science

Head of the Department: Prof. (Dr.) Arup Mukherjee

Introduction of the Department/Centre: 2019

Courses Offered:

Sl. No.	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1.	B.Sc. in Forensic Science	UGC	3 years	120	10+2 Science	Through CET
2.	M.Sc. in Forensic Science	UGC	2 years	60	B.Sc. Science	Through CET

List of Faculty:

Sl. No.	Name of the Faculty Member	Present Designation	Area of Specialization/Research Interest
1.	Prof. (Dr.) Arup Mukherjee	Head of the Department	Forensic Chemistry
2.	Sujoy Mitra	Academic Coordinator	Questioned Documents/Cyber Crime and Law and allied subjects
3.	Gaurab Som	Assistant Professor	Forensic Psychology &

			Graphology(QD)/Forensic Ballistics and allied subjects
4.	Ashmita Paul	Assistant Professor	Forensic Biology and Forensic Medicine/Forensic Toxicology and allied subjects
5.	Janyabi Pandit	Assistant Professor	Cyber and Digital Forensics and allied subjects

Field Projects/Internship undertaken by the students: 12

Linkage with Institution/Industries: ISOEH India, under MoU industry-institute partnership

Students from outside of the State: 4

Whether any examination reform has been implemented during the year: Yes, (ERP interfaces)

Futuristic Plans:

Sl. No.	Course	UG/PG/certificate
1.	Initiated Post Graduate Diploma program in Cyber Forensic, Digital Defense and Homeland Security, year 2021-22	PG Diploma
2.	Establishing Cyber Forensic, Digital Defense state of art laboratory facility accessible in state levels, 2023	Lab interface

Workshop/Seminar/Webinar/Other events in 2020-21:
1. One Faculty Development Program in Digital Forensics
2. Two workshops on Digital Forensic basics and Advanced Digital Forensic
3. Four Webinars on Cyber Forensic, Ethical Hacking, Steganography and Questioned Documents

Faculty Profile

Dr. Arup Mukherjee
Head of the Department
Qualification: Phd
Seminar/Webinar organized/participated in 2020-21: 06
Workshop organized/participated in 2020-21: 02
Invited Lectures in 2020-21: 02
Research Papers Published: 04

PhD Guided: 01
Courses designed: 02
Professional Activities: AICTE expert, PMRF evaluator, Member BIS-FAD 8

Mr. Sujoy Mitra
Academic Coordinator

Qualification: M.Sc (forensic Sc)

Seminar/Webinar organized/participated in 2020-21: Seminar 4, Workshop 3
MoU/Collaboration: One (ISOEH)
Refresher/Orientation Courses: 02 (B.Sc. in Forensic Science and M.Sc. in Forensic Science)
Courses designed: 03 at UG & PG levels
Consultancy Extended: 05 (Five)
Professional Activities: Life and Fellow member of IAFS and ADFI, National Level GI (Fire / Explosion) Surveyor, Expert Banker, CDRA, ITLE, National Level Forensic Auditor, international Forensic Examiner of Questioned Documents.

Mr. Gaurab Som

Assistant Professor

Qualification: M.Sc (forensic Sc)

Seminar/Webinar organized/participated in 2020-21: Seminar/webinar 04, Workshop 3
Invited Lectures in 2020-21:
Refresher/Orientation Courses: 02 (B.Sc. in Forensic Science and M.Sc. in Forensic Science)
Consultancy Extended: 05 (Five)
Professional Activities: Crime Scene & Homeland Security Investigations (Fraud Analysis/Corporate Intelligence/Arson/Surveillance)
Any other information: ISO 9001 Quality Management Certification (BSI INDIA)

Ashmita Paul

Assistant Professor

Seminar/Webinar organized/participated in 2020-21: 02

Professional Activities: Forensic Field Investigations (Vehicular and Industrial Fire/Explosion), Crime Scene Reconstruction, Teaching and assisting in administrative activities of DFS

Janyabi Pandit

Assistant Professor

Seminar/Webinar organized/participated in 2020-21: 04

Workshop organized/participated in 2020-21: 01

Professional Activities: Mobile and Digital Forensics, Teaching and assisting in administrative activities of DFS

School of Engineering Science

Prof (Dr.) Sibamay Dasgupta

Director

The School of Engineering Science plays an important role in a Technological University. Considering the economic and industrial development of the country and the state, and also considering the Vision and Mission of the University, the School of Engineering Science strives for achieving excellence and significant contributions. This journey being a long and sustained one, quite a few challenges are met successfully in 20202021The most significant issue was pandemic COVID 19. The faculty members, supporting staffs and students of the Departments and Centre under the school accepted this challenge and very successfully handled the situation in online mode. Online teaching, online webinar, online meeting, virtual labs marked truly the advancement using technology. The cooperation offered by all concerned in this regard was really admirable. This report highlights the activities of the Departments and Centres under the School within a really difficult time. I wish a pleasurable reading experience and impression, for the readers of this annual report.

Prof. (Dr.) Sibamay Dasgupta

Introduction about the School:

The School of Engineering Science is dedicated to look after the teaching-learning, research, innovation and consultancy in Engineering and allied disciplines. It is having three departments and two centres under its umbrella:

1. Department of Industrial Engineering and Management
2. Department of Microelectronics & VLSI
3. Department of Media Science
4. Centre of Robotics & 3D Printing
5. Centre of Biomedical Engineering

The Department of Media Science, The Centre of Robotics & 3D Printing and The Centre of Biomedical Engineering were started in 2019. The Department of Industrial Engineering and Management and The Department of Microelectronics & VLSI are old Departments.

The Courses offered by them are:

- M.Tech in Industrial Engineering and Management (AICTE approved)
- M.Tech in Microelectronics and VLSI (AICTE approved)
- B.Sc. in Animation and Film Making (Non-AICTE UGC program)
- B.Sc. in Media Science (Non-AICTE program UGC program)

- M.Sc. in Media Science (Non-AICTE program UGC program)

• B.Sc. in Robotics & 3D Printing (NON-AICTE UGC program)

Thrust Areas

With the introduction of Industry 4.0, newer skills have become relevant. Considering these skills, the thrust areas of the school have been identified.

Thrust Areas of research: The thrust areas of the School are:
- Ergonomics & Work System Design
- Product Design
- Quality Control
- Operations Research
- Production Planning and Control
- Decision Support Systems
- Embedded Systems
- VLSI
- Microelectronics & Device Technology
- Energy Studies
- Smart Sensors
- Signal Processing
- Robotics & Automation
- 3D Printing & Additive Manufacturing
- Virtual & Remote Labs
- IoT
- Image Processing
- RPA

- Animation
- Film Making
- VFX Film Making
- Graphics
- AR/VR
- Gaming and APP Development
- Digital Health
- Telemedicine
- Occupational Health
- Non-invasive medical instrumentation
- Biomedical Instrumentation
- Intelligent Instrumentation
- Outcome Based Education.

Initiative:

- As far as teaching is considered, the school has continued its emphasis on Outcome Based Education (OBE) and its implementation. Teaching as per Course Outcomes (CO), Program Outcomes (PO) and Bloom's Taxonomy has been adopted. Curriculums were converted to CBCS/ AICTE format whichever is applicable for the program concerned.
- Online teaching, Virtual Labs, flipped learning were not only continued under COVID 19 situation, but also strengthened in their use.
- Laboratories of different departments under the schools were upgraded.

Department of Industrial Engineering and Management
Head of the Department: Dr. Bivash Mallick

Introduction of the Department

The Department of Industrial Engineering and Management (IEM) was established in 2006. The department functions under the School of Engineering Science of MAKAUT, WB in the Main Campus at Haringhata, Nadia. It offers two-years AICTE approved M. Tech program in Industrial Engineering and Management with an intake capacity of 30 students along with Doctoral program. The department possesses state of the art laboratories such as Work System Design Laboratory, Simulation Laboratory, Quality Design & Control Laboratory and Design Thinking Laboratory. The experienced and competent faculty members and technical support staff of this department are relentlessly exerting themselves to provide with opportunities that will prepare students for professional practice.

Courses Offered:

Sl no	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1	M. Tech program in Industrial Engineering and Management	AICTE approved	2 Years	30	An Indian citizen with a relevant AICTE approved B.E./ B.Tech degree or appearing in the final year examination in any branch of	Admission is based on performance in the Post Graduate Entrance Test (PGET) conducted by the university. Candidates with valid

				engineering / technology is eligible to apply for admission to this program.	GATE score may also apply for admission in this program directly.

List of Faculty:

Sl No	Name of the Faculty Member	Present Designation	Area of Specialization /Research Interest
1	Dr. Sibamay Dasgupta	Adjunct Professor	Ergonomics, Biomedical Engineering, Power Electronics, Instrumentation, Robotics
2	Dr. Manik Chandra Das	Associate Professor	Operations Research, development and applications of multiple criteria decision-making tools, production and operations management, Quality and reliability Engineering, optimization etc.
3	Dr. Bivash Mallick	Assistant Professor	Inventory Management, Project Engineering and Management, Quality Engineering, Work Design and Measurement, Ergonomics/ Human Factors Engineering
4	Dr. Sourav Das	Adjunct Associate Professor	Operations Research, Forecasting, Logistics and Transportation, Stochastic models, Simulation Modelling and Analysis, Product design and development
5	Dr. Ankita Ray	Assistant Professor	Operations Research, circular economy, sustainable supply chain management.

Students undergone for higher studies (2020-21):

- Mr. Anirban Mitra: Ph. D programme of IIT, Roorkee

- Mr. Arpan Paul: Ph. D programme of NIT, Rourkela

- Mr. Santonab Chakraborty: Fellow Programme of NITIE, Mumbai

- Mr. Subhradeep Maitra: Research Programme (Ph.D.) of IIT, Kharagpur

Field Projects/Internship undertaken by the students (2020-21):

1. Association Rule Mining-based Inventory Control for Effective Supply Chain Management in the Indian Healthcare Units.

2. An Evaluation of Musculoskeletal Disorder and Cognitive Analysis of Toto Drivers in West Bengal.

3. Application of the Interpretive Structural Modeling Method for Sustainable Solid Waste Management in Rural Areas.

4. Implementation of Lean Manufacturing Techniques in Small and Medium Enterprises (SMEs)

5. Optimization of Rain Water Harvesting in Sundarban Delta Region by Monte Carlo Simulation.

6. Impact of consumer buying behaviour on demand pattern of Indian Automobile Industry: An empirical study during Covid-19 pandemic.

7. Analysing the barriers for the implementation of Industry 4.0 in Indian Dairy Industry: An ISM-MICMAC approach.

Details of Support Staff:

Sl No.	Name of the staff	Present Designation
1	Mr. Mithun Ghosh	Technical Assistant
2	Mr. Chinmoy Mondal	Data Entry Operator
3	Mr. Bholanath Ghosh	Support Staff

Other plans: *Revision of Curriculum in 2021-2022 academic year.*
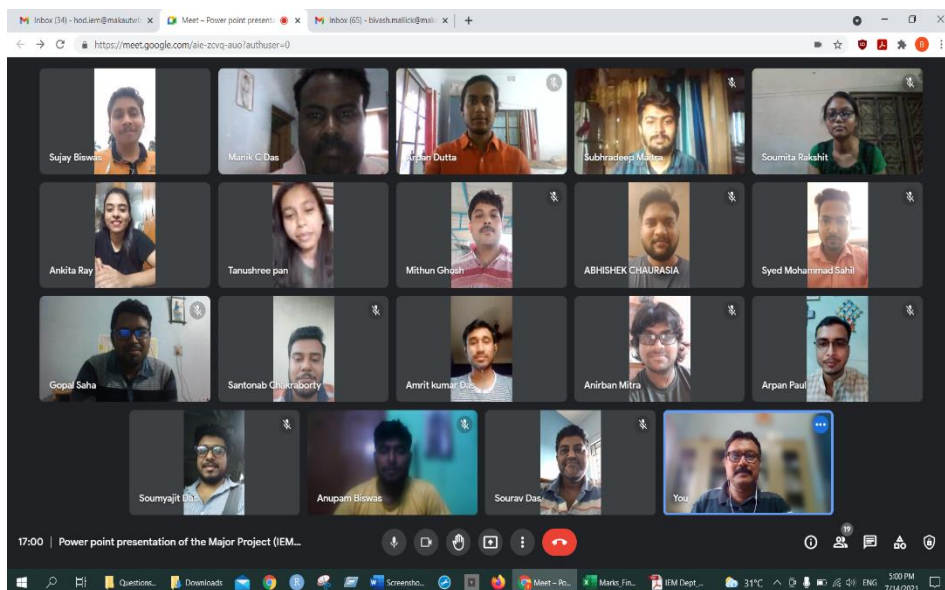
Course end survey and Students' (2019-21 batch) feedback for quality improvement of the Department

Teaching-learning process in Blended mode

Faculty Profile

Dr. Sibamay Dasgupta

Adjunct Professor& Director

Qualifications: Ph.D.(IISC Bangalore)
Seminar/Webinar organized/participated in 2020-21: Various Webinars of MAKAUT WB

Refresher/Orientation Courses: Certified AICTE Faculty Mentor, Blue Prism RPA Foundation Educator

PhD Guided: one awarded

Courses designed: EEE syllabus of WBUT in 2005, Work System Design, Robotics & 3D Printing Syllabus of MAKAUT WB, Robotics and RPA, Optimal Control for Management for MAKAUT WB, Process Control in Food Technology

Patents/IPR Generated: one is under process.

Consultancy Extended: Organized the Assessment of the Proposal from NIT Durgapur for the Centre of Excellence on ROBOTICS of Govt West Bengal by Prof Subir Saha of IIT Delhi during 2019-20

Dr. Manik Chandra Das

Associate Professor

Qualifications: Phd
Seminar/Webinar participated in 2020-21:

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1. Attended awareness Webinar on Outcome Based Education and Accreditation for the Engineering Colleges in West Bengal organized by MAKAUT, WB on 15th December 2020.
2. Attended Higher education conclave on NBA & ABET organized by MAKAUT, WB on 9th January 2021.
3. Attended Webinar on Teacher extraordinary: The unknown facet of Bharatratna organized by MAKAUT, WB on 17th January 2021.
4. Attended Webinar on Learning outcome based approach for curriculum planning and development organized by MAKAUT, WB on 30th January 2021.
5. Attended Webinar on Development of new generation ceramic material organized by MAKAUT, WB on 30th January 2021.
6. Attended Webinar on National Education policy organized by MAKAUT, WB on 30th January 2021.
7. Attended Webinar on Precision agriculture: the future of farming organized by MAKAUT, WB on 24th March 2021.
8. Attended Webinar on Simple tools and technique for preparation of digital content organized by MAKAUT, WB on 24th April 2021.
9. Attended Webinar on Online inauguration program on digital library organized by MAKAUT, WB on 21st May 2021.
10. Attended Webinar on ICC EDTECH SUMMIT-An Interface between Academia and EdTech industry for scopes and challenges of remote learning and the way forward tomorrow organized by ICC on 26th June 2021

Workshop participated in 2020-21:
1. Attended 5-day online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by AICTE during 18th -22nd January 2021.
2. Attended the international education and skill summit-TIESS Virtual 2021 during 27th – 30th January 2021.
3. Attended AICTE ATAL FDP on Additive Manufacturing during 16th – 20th February 2021.
4. Attended AICTE ATAL FDP on Design Thinking during 21st – 25th June 2021.
5. Attended Virtual National workshop on Sponsored Research Projects (Opportunities, Procedures and Best Practices) organized by ESCI during 24th -25th June 2021.

Invited Lectures in 2020-21:
1. Lecture delivered in Induction Programme on the topic Value Education on 19th December 2020 at Jalpaiguri Government Engineering College.
2. Lectures delivered in Future Skill Training Programme Under TEQIP III on Quantitative Decision Making on 1st, 4th, 8th , 11th, 15th, 26th, 27th and 29th March 2021 at MAKAUT, WB

Research Papers Published:
- **Manik Chandra Das**, Bijan Sarkar, *"Fusion between Full Consistency Method and Ideal Solutions with Constraint on Values for Material Selection: A Consilient Conspectus Approach"*, Journal of Institutions of Engineers Series C, DOI: <u>10.1007/s40032-021-00739-y</u>, 2021.

Any other information:
1. Acted as external examiner of 3rd Semester MBA Viva Voce Examination on 2nd March 2021 at School of Management Sciences, IIEST Shibpur.

Dr. Bivash Mallick

Assistant Professor and Head

Qualification: Ph.D.(JU)

Seminar/Webinar organized/participated in 2020-21:
- ❖ Participated Webinar on "Higher Education Conclave on NBA & ABET" organized by Mastersoft ERP Solutions Pvt. Ltd. Nagpur WB on 09th January 2021.
- ❖ Attended Webinar on "The Analytic Hierarchy Process: A Tool for Prioritization, Evaluation, and Selection" organized by Kalyani Govt. Engineering College, Kalyani, West Bengal 30th January 2021.
- ❖ Attended webinar on "Crescendo in Pedagogy, Andragogy, and Heutagogy" organized by the Department of Production Engineering, Jadavpur University on 30th March 2021.
- ❖ Participated Webinar on "Principals and IQAC Coordinators Meet" organized by Mastersoft ERP Solutions Pvt. Ltd. Nagpur WB on 28th & 29th May 2021.
- ❖ Attended Webinar on "Design Thinking and Innovation" organized by MAKAUT, WB on 11th September 2021.
- ❖ Attended Webinar on Outcome Based Education and Accreditation for the Engineering Colleges in West Bengal organized by MAKAUT, WB on 15th December 2020.
- ❖ Participated National Webinar on "Online Education in the Changing Times: Problems and Prospects"" organized by Vidyasagar University Teachers' Association (VUTA), Vidyasagar University, Midnapore, West Bengal during 7th - 8th July, 2020.

Workshop organized/participated in 2020-21:
- ❖ Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Design Thinking" during June 21 to 25th June 2021 at Bharati Vidyapeeth College of Engineering.

❖ Attended SPARC Sponsored Online International Workshop on "Healthcare Systems and Automation" conducted by IIT Kharagpur and Purdue University, USA on 20th March 2021.

❖ Participated TEQIP- III Sponsored online short-term course on "Safety Management for Construction Projects" held at Indian Institute of Technology, Delhi during November 09 to 13, 2020.

❖ Participated TEQIP- III Sponsored Five Days Online Workshop on "Outcome based education and NBA Accreditation Process" held at Malaviya National Institute of Technology Jaipur during October 19 to 23, 2020.

Invited Lectures in 2020-21:

❖ Delivered an Invited talk on "Kaizen: An Essential Tool for Continuous Improvement" in the International Conference on Recent Trends in Engineering and Technology, organized by Mallabhum Institute of Technology, West Bengal, India, during 18th to 20th March, 2021. (Online)

Research Papers Published:

❖ Sima Kundu, Ankita Ray and Bivash Mallick, "Analysis of Issues of ELV management in Indian Automobile sector: A Fuzzy Analytical Hierarchy Process Approach" International Journal of Environment and Waste Management (Accepted)

❖ Shankar Chakraborty, Santonab Chakraborty, Bivash Mallick, "Mining of Association Rules for Treatment of Dental Diseases," Journal of Decision Analytics and Intelligent Computing (Accepted)

❖ Das, S. and Mallick, B, "Study on Postural Analysis and Ergonomic Interference on Drivers", Available at http://dx.doi.org/10.2139/ssrn.3846861

❖ Soumyajit Das and Bivash Mallick (2021), "Failure mode analysis approach for enhancing Room Heater Safety", International Conference on Recent Trends in Engineering and Technology, Mallabhum Institute of Technology, West Bengal, India.

Any other information:

• Acted as External Expert for PG, Engineering Thesis Presentation and Viva Voce Examination on September 26, 2020 in the Department of Mechanical Engineering, Jadavpur University.

Dr. Ankita Ray
Assistant professor (C)
Qualification: Ph.D.(IIT-ISM)
Workshop organized/participated in 2020-21: "Online Training Program on "Python for Engineers." 20th-24th December 2020
Research Papers Published:

- Ray, A., De, A., Mondal, S., & Wang, J. (2021). Selection of best buyback strategy for original equipment manufacturer and independent remanufacturer–game theoretic approach. *International Journal of Production Research*, *59*(18), 5495-5524.

- Khaba, S., Bhar, C., & Ray, A. (2020). A study on key lean enablers of the coal mining sector using ISM, MICMAC and SEM. *The TQM Journal*.

- Ray, A., & Khaba, S. (2020). Study of ethical issues of green procurement in Indian automobile industry using integrated ISM-fuzzy MICMAC–AHP–VIKOR. *Journal of Global Operations and Strategic Sourcing*.

- Sima Kundu, Ankita Ray, Bivash Mallick, "Study of issues of ELV management in India: A fuzzy Analytical Hierarchy Process Approach", International Journal of Environment and waste management" (Accepted)

- Rupak Sarkar , Ankita Ray, "Status and evaluation of existing municipal solid waste management in kalyani kanchrapara gayespur city a case study", International Journal of Environment and waste management" (Accepted)

- Subhradeep Mitra and Ankita Ray, "A study on impact of COVID 19 pandemic on consumer behaviour on the supply chain of automobile industry", XIV Annual International conference of the society of Operations management, 14th to 15th December,2020

- Gopal Saha and Ankita Ray, "Analyzing impact of COVID 19 on economic performance of centralized and decentralized supply chain", XIV Annual International conference of the society of Operations management, 14th to 15th December,2020.

Dr. Sourav Das

Adjunct Associate Professor

Qualification: Phd (USA)

Workshop organized/participated in 2020-21: Participated TEQIP- III Sponsored online short-term training course on "Construction Project Management" held at Indian Institute of Technology, Delhi during November 30 to December 13, 2020.

Books/Book Chapter Published:

- Saikat Basu, Sudipta Saha, Sourav Das, Rajlaksmi Guha, Jayanta Mukhopadhyay, Manjunatha Mahadevappa- "Montaj": A Gaming System for Assessing Cognitive Skills in a Mobile Computing Platform, book chapter in Springer Nature (accepted)

Department of Microelectronics and VLSI Technology
Head of the Department: Prof. Amitabha Sinha

Courses Offered:

Sl no	Course offered	AICTE / UGC	Duration	Intake	Eligibility	Enrolment Methods
1	M.Tech in Micrioelectronics and VLSI Technology	AICTE	2 years	The intake is altogether 23 with 18 students in General Category and 5 seats reserved for SC/ST and OBC Category	An Indian citizen with a relevant AICTE approved Bachelor's Degree in Engineering/Technology in ECE /AEIE I Control& Instrumentation Engg. or appearing in the final year examination of such programme or equivalent. Equivalence means the candidate should be an Associate Member of a Professional of Engineers that are recognized by the Govt. of India for the purpose of admission to higher studies in Engineering. M.Sc. or final	Admission will be through an entrance test (PGET) followed by a Technical Interview in relevant subject for all candidates including the GATE qualified candidates. Valid GATE Score and 60% Marks /6.75 equivalent CGPA is required.

					year M.Sc. Candidates in Electronics /Physics (with Electronics special) branches are also eligible. However, degrees acquired through any distance education programme are not eligible.	

List of Faculty:

Sl No	Name of the Faculty Member	Present Designation	Area of Specialisation/Research Interest
1	Prof. Amitabha sinha	Director (academic reforms) & U.G.C. Adjunct Faculty	Processor Architecture, DSP, Digital VLSI
2	Dr Madhumita Das Sarkar	Associate Professor	Modeling of Semiconductor Devices, Photovoltaic Circuit and System Design
3	Dr Mihir Kumar Mahata	Assistant Professor	III-V heterostructure semiconductor devices (Sensors, Solar cell, HEMTetc.); Analog VLSI Design.
4	Sabyasachi Sen	Faculty	Design and Implementation of Fault-Tolerant Memory Systems
5	Sowvik Dey	Assistant Professor	Design and Implementation of Fault-Tolerant Memory Systems

Number of Students placed in 2020-21: 5 students

Number of successful candidates in NET/GATE (2020-21): 3 students

     1**.** Deepak Kumar Sah: Gate 2020 Rank: 3719.

     2. SoumyaSengupta: Gate 2021 Rank: 18537.

     3. Amit Sarkar: Gate 2021 Rank: 9568.

Students undergone for higher studies: 2 students

Details of Support Staff: 2

     One Technical Assistant: Chumki Das

     One group-D: Binay Bhuina

Students from outside of the country/state:

     From Outside of State: 3 students

     1. Deepak Kumar Sah

     2. Farzana Khatoon

     3. Antarik Chetia

Futuristic Plans: New Proposed Programme in 2021-22

Sl. No.	Course	UG/PG/certificate
1	VLSI and Embedded Systems	PG

Workshop/Seminar/Webinar/Other events in 2021-21:

Title of the professional development Programme organised by the department	Dates: (From – To)
Induction Programmes for 1st year students	24th November 2020 to 2nd January 2021
5 Days FDP on "Scope and Opportunities of Analog VLSI Design in Industry and Academia: Concepts to Full Custom Chip Design"	21st – 25th September 2020
3 Days FDP on "ADVANCED ENGINEERING MATHEMATICS"	17th – 19th September 2020
Webinar on: Sensor & Advanced Data Acquisition System	18 Jun, 2020 12:00 PM
Webinar on: "Scope of Advanced Data Acquisition System in Industry & Academia"	26 Jul, 2020 06:00 PM
Webinar on: "Advanced Data Acquisition System in Industry 4.0 & Remote Hardware Laboratory".	31 Jul, 2020 10:00 AM

Promotional Webinar: "Live Interactive Session on M.Tech in Microelectronics and VLSI Technology and M.Tech in VLSI and Embedded Systems".	21st June 2021

Demonstration of Laboratory Equipment (Power Quality Analyzer) on 28st July 2020.

Faculty Profile

Prof. Amitabha Sinha
Director (academic reforms) & U.G.C. Adjunct Faculty

Qualification: Ph.D(IIT Delhi)

Seminar/Webinar organized/participated in 2020-21: 4

Invited Lectures in 2020-21: 1
Research Papers Published: 3 (journal papers) + 3 (Int'l conference papers)
Books/Book Chapter Published: 2
Refresher/Orientation Courses: Faculty development Programme : 2
PhD Guided: Thesis submitted (2 Research Students)
Courses designed: 1 (M.Tech in VLSI & Embedded Systems)

Dr. Madhumita Das Sarkar
Associate Professor (Microelectronics), MAKAUT, West Bengal

Qualification: Phd

Seminar/Webinar organized as Convener and Coordinator: 4
Workshop with Industry organized as Convener and Coordinator: 2
Faculty Development Program (FDP) organized as Convener and Coordinator: 2**,** With Cadence, India: 1 Sanctioned in ATAL FDP
Invited Lectures in 2020-21: Invitation to speak at Interactive Dialog: IEEE Day Observations-Dreams, Dialogs,   and Directions for a Better Tomorrow organized by IEEE Bangladesh Section October 2020
Seminar attended 20 or more organized by: IEEE R10 and global Section, Mathworks India and Global & other Industries like: Kipps amd Zonen, OTT Hydromet, Bangalore, Tata Power.. etc National and International Laboratory; Like Sandia National Lab,

Workshop attended: 2, One with Full Custom Chip Design with Cadence and other with Robotics and 3D printing
Research Papers Published: 1 in International Journal Taylor and Francis, SCI Indexed, 2 in International Conferences
Research Projects: (2019-2022) :1 Major Research and Development Project, from DST, WB
MoU/Collaboration: Agreement under Processing with NRDC, Govt of India and with IIEST, Shibpur and WEBREDAm West Bengal
Refresher/Orientation: Attended one month Course on Full Custom Chip Design with Cadence, India : completed an honors course on Battery Management System from Colorado Boulder under Courseera.
PhD Guided: 1 student is going to submit thesis + 2 enrolled
Patents/IPR Generated: under filing guidance
Professional Activities: Acted as HoD in the Department of Microelectronics and VLSI technology and did all sort of academic and administrative and Research and Developmental activities at my highest level, doing all academic and Research activities almost staying from home, coordinating the upcoming ATAL FDP

Dr. Mihir Kumar Mahata

Assistant Professor

Qualification: Phd (IIT KGP)

Seminar/Webinar organized/participated in 2020-21: 9 (detail follows)

Sl No.	Details of Webinar
1	Webinar on "Sensor and Advanced Data Acquisition Systems" Date: 18.06.2020 Organizer: MAKAUT,WB Department of Microelectronics and VLSI Technology, MAKAUT,WB
2	Webinar on "Matlab and Simulink for IoT Application in Engineering" Date: 22.06.2020 Organizer: MAKAUT,WB
3	Webinar on ""Resurrecting the Emerging Contours of Public Health in Anthropocene: The Urgency of Digital Health Revolution Series-I" Date: 27.06.2020 Organizer: DEPARTMENT OF ENVIRONMENTAL SCIENCE ,MAKAUT,WB
4	Webinar on "Advances in Renewable Energy Generation in The World Vis a Vis India's Perspective" Date:05.07.200 Organizer: School of Energy & Environmental Sciences , MAKAUT,WB
5	Webinar on:"Scope of Advanced Data Acquisition Systems in Industry and Academia" Date: 26.07.2020 Organizer: MAKAUT,WB Department of Microelectronics and VLSI Technology, MAKAUT,WB
6	Webinar on:"Advanced Data Acquisition System in Industry 4.0 and Remote Hardware Laboratory". Date: 31.07.2020 Organizer: MAKAUT,WB Department of Microelectronics and VLSI Technology, M7AKAUT,WB
7	Webinar on:"Key to Achieving Bliss Session 2" Date: 05.05.2021 Organizer: MAKAUT,WB
8	Webinar on: "Higher Education Conclave on NBA & ABET" Date: 09.01.2021 Organizer: MasterSoft ERP Pvt. Ltd.
9	Webinar on:Live Interactive Session on M.Tech in Microelectronics and VLSI Technology and M.Tech in VLSI and Embedded Systems" Date:21st June 2021 Organizer: MAKAUT,WB Department of Microelectronics and VLSI Technology, MAKAUT,WB

Workshop organized/participated in 2020-21: 4

Sl No.	Details of Workshop
1	5 Days FDP on "Scope and Opportunities of Analog VLSI Design in Industry and Academia: Concepts to Full Custom Chip Design" Date: 21st – 25thSeptember2020 Organizer: MAKAUT,WB Department of Microelectronics and VLSI Technology, MAKAUT,WB
2	3 Days FDP on "ADVANCED ENGINEERING MATHEMATICS" Date: 17th –19thSeptember2020 Organizer: MAKAUT,WB Department of Microelectronics and VLSI Technology, MAKAUT,WB
3	2 Days Workshop on "Sponsored Research Projects (Opportunities, Procedures & Best Practices)" Date: 24/06/2021 to 25/06/2021 Organizer: Engineering Staff College of Indian
4	6 Days STTP on " Quantum Computing and Its Applications" Date: 19th –24thJuly2021 Organizer: MAKAUT,WB Department of Computer Science and Engineering, MAKAUT,WB

Courses designed: 2 courses
1. Analog VLSI Circuits & Systems (PGMVD-201),
2. Microelectronics Lab-I (PGMVD-292)

Professional Activities: Involved in Departmental and institutional administrative work.

Mr. Sabyasachi Sen
 Faculty

Qualification: MSc

Seminar/Webinar organized/participated in 2020-21: 4

Refresher/Orientation Courses: Faculty development Programme – 2 nos
Courses designed: 2
- Communication Engineering (PCC-IT 404)
- Communication Engineering Laboratory (PCC-IT 494)

Sowvik Dey
Faculty

Qualification: ME (CSE), Pursuing Ph.D.

Seminar/Webinar organized/participated in 2020-21: 8

Sl No.	Details of Webinar
1	Webinar on "Introduction of XILINX RFSoC" Organizer: CoreEL Technologies and XILINX Venue: Online Date: 19th June 2020
2	Webinar on "Sensor and Advanced Data Acquisition Systems" Date: 18.06.2020 Organizer: MAKAUT,WB Department of Microelectronics and VLSI Technology, MAKAUT,WB
3	Webinar on:"Scope of Advanced Data Acquisition Systems in Industry and Academia" Date: 26.07.2020 Organizer: MAKAUT,WB Department of Microelectronics and VLSI Technology, MAKAUT,WB
4	Webinar on:"Automation, Robotics and Intelligence" Date: 27.07.2020 Organizer: MAKAUT,WB Department of Computer Science and Engineering, MAKAUT,WB
5	Webinar on:"Advanced Data Acquisition System in Industry 4.0 and Remote Hardware Laboratory". Date: 31.07.2020 Organizer: MAKAUT,WB Department of Microelectronics and VLSI Technology, M7AKAUT,WB
6	Webinar on:"Master the Main Frame" Date: 06.10.2020 Organizer: MAKAUT,WB in association with RCCIIT
7	Webinar on: Simple Tools and Techniques for Preparing of Digital content" Date: 24.04.2021 Organizer: MAKAUT,WB
8	Webinar on:Live Interactive Session on M.Tech in Microelectronics and VLSI Technology and M.Tech in VLSI and Embedded Systems" Date:21st June 2021 Organizer: Department of Microelectronics and VLSI Technology, MAKAUT,WB

Workshop organized/participated in 2020-21: 3

Sl No.	Details of Workshop
1	5 Days FDP on "Scope and Opportunities of Analog VLSI Design in Industry and Academia: Concepts to Full Custom Chip Design" Date: 21st – 25thSeptember2020 Organizer: MAKAUT,WB Department of Microelectronics and VLSI Technology, MAKAUT,WB
2	3 Days FDP on "ADVANCED ENGINEERING MATHEMATICS" Date: 17th –19thSeptember2020 Organizer: MAKAUT,WB Department of Microelectronics and VLSI Technology, MAKAUT,WB
3	6 Days STTP on " Quantum Computing and Its Applications" Date: 19th –24thJuly2021 Organizer: MAKAUT,WB Department of Computer Science and Engineering, MAKAUT,WB

Courses designed: 3 courses
   1. ALGORITHMS (PGMVD301A), 2. VLSI DESIGN LAB-I, and 3. VLSI DESIGN LAB-II

Department of Media Science
Head of the Department: Krishnendu Saha

Introduction of the Department:2019
Courses Offered:

Sl no	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1	BSc in Animation and Film making	UGC	3 Years	30	10+2 With Any Stream	CET
2	BSc in Animation, Film making,Graphics and VFX	UGC	3 Years	30	10+2 With Any Stream	CET
3	BSc in Media Science	UGC	3 Years	30	10+2 With Any Stream	CET
4	BSc in Gaming and Mobile application	UGC	3 Years	30	10+2 With	CET

	Development				Any Stream	
5	BSc in Multimedia Science AR & VR	UGC	3 Years	30	10+2 With Any Stream	CET
6	MSc in Media Science	UGC	2 Years	18	Graduate from any stream	CET

List of Faculty:

Sl No	Name of the Faculty Member	Present Designation	Area of Specialisation/Research Interest
1	Krishnendu Saha	HOD and Assistant Professor	Computational Geometric algorithms
2	Abhishek Bhattacharjee	Assistant Professor	Media Science & 3D Animation

Field Projects/Internship undertaken by the students: Internshala Online Internship

Details of Support Staff:
1. Mohua Podder, Trainer
2. Samman Roy, Trainer (Visiting)
3. Kaushik Raha, Lab Assistant
4. Sougata Som,Lab Assistant

Students from outside of the country/state: Outside the state

List of new courses started in 2020-21:

Sl. No.	Courses started in 2020-21	UG/PG/certificate
1	BSc in Animation, Film making, Graphics and VFX	UG
2	BSc in Media Science	UG
3	MSc in Media Science	PG

Whether there is any change in the Curriculum during the year: CBCS adopted
Whether any examination reform has been implemented during the year: Online MCQ ERP
Futuristic Plans: Starting of various diploma and certificate program
Workshop/Seminar/Webinar/Other events in 2020-21:
1. Day Faculty Development Program on (16-20th September 2020
2. Making Scientific films

3. Digital Video Editing
4. Animation For academics
5. Jointly organized by Department of Industrial Engineering and Management and Department of Microelectronics and VLSI, Funded by TEQIP-III)
6. Webinar organized with school connect program

Significant Events
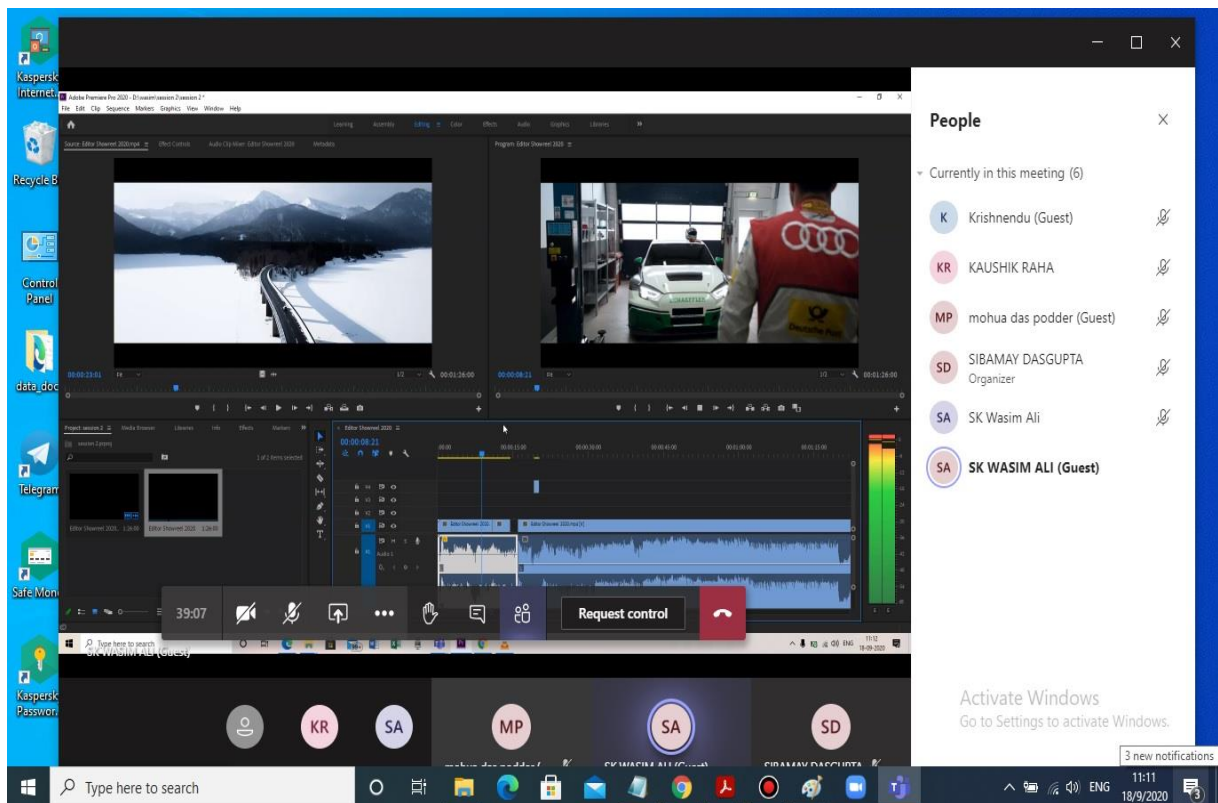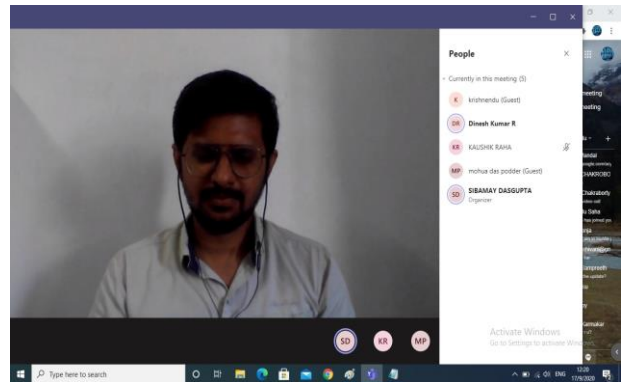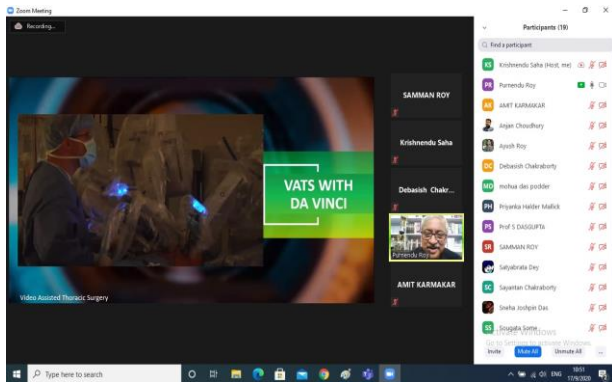
Faculty Profile

Krishnendu Saha
HOD and Assistant Professor

Qualification: MCA, Mtech, Pursuing Phd
Seminar/Webinar organized/participated in 2020-21: 03
Workshop organized/participated in 2020-21: 10
Courses designed: 1 UG Courses
Professional Activities: BOS Member of CCPTR Program & Affiliated College Media Science Syllabus, NAAC departmental core committee member

Abhishek Bhattacharjee
Assistant Professor

Qualification: M.Sc (Media Sc)
Seminar/Webinar organized/participated in 2020-21: 3 Webinar organised, 10 webinar participated

Courses designed: 2 UG Courses
Professional Activities: BOS Member of CCPTR Program & Affiliated College Media Science Syllabus, NAAC:AQAR Sub-Coordinator for Criterion 2 (Teaching, Learning & Evaluation), NAAC Departmental Core Committee Member (Department of Media Science)

Centre of Robotics & 3D Printing.
Head of the Department: Prof. Sibamay Dasgupta

Introduction of the Department/Centre: The Centre for Robotics and 3D Printing, MAKAUT, WB began its journey in the academic year 2019-20 with a futuristic and unique B.Sc. course in Robotics and 3D Printing. The Centre began its maiden journey with industry ready curriculum, state of art laboratories, skilled academicians and industry experts.

Courses Offered:

S/L	Course offered	AICTE/UGC	Duration	Intake	Eligibility	Enrolment Method
1	B.Sc Robotics & Robotic Process Automation	Non AICTE	3yr	30	10+2	CET

List of Faculty:

Sl No	Name of the Faculty Member	Present Designation	Area of Specialisation/ Research Interest
1	Dr. Sibamay Dasgupta	Director, School of Engg. Science	Ergonomics, Biomedical Engg, Power Electronics, Instrumentation, Robotics
2.	Mr. Anjan Choudhury	Assistant professor	Digital Manufacturing and Design, Industry 4.0, Additive manufacturing, Robotics, Supply chain management
3.	Mr. Shambo Chatterjee	Assistant professor	
4.	Mr. Amit Karmakar	Assistant professor	Automobile vibration and ride comfort, vehicle dynamics, Robotics,
5.	Ms. Trisha Chatterjee	Laboratory Assistant	

Field Projects/Internship undertaken by the students: 1
Whether there is any change in the Curriculum during the year: Yes

Whether any examination reform has been implemented during the year: Yes

Futuristic Plans: New Proposed Programme in 2021-22:

Sl. No.	Course	UG/PG/certificate
1	B.Tech in Robotics and Automation	UG

Workshop/Seminar/Webinar/Other events in 2021-21:

Sl. No.	Name of the webinar	Date
1	Career Avenues in Robotics and Automation	7th sept 2021
2	Career Avenues in Robotics and Automation	20th July 2021
3	Career Avenues in Robotics and Automation	2nd July 2021

Faculty Profile

Shambo Chatterjee
Assistant Professor

Qualification: M.Tech. in Electrical Engineering(Power System)
Projects done:
B.Tech. - Study of Reactive Power
M.Tech.-Model Identification and Control of Air Temperature of A Resistive Heating Chamber in A Duct Air-Flow and Drying Process

Professional Experience

1. *Worked Project Assistant in a Department of Science and Technology sponsored project, titled "Application of Non-Linear Robust Control for Air Flow Modulation in Model Industrial Process." under supervision of Dr. Subhashis Datta and Asst. Prof. Mr. Biplab Satpati in University Institute of Technology, The University of Burdwan, Burdwan since 1st March,2011 to 30th June 2012*
2. Worked as Assistant Professor in Electrical Engineering Dept. in Mallabhum Institute of Technology, Mallabhum, Bishnupur since 16th July 2012 to 9th January 2013
3. Worked as Assistant Professor in Electrical Engineering Dept. in Regent Education and Research Foundation, Barrackpore since 10th Jan 2013 to 31st August 2015
4. *Worked as Senior Project Fellow in a project titled "Control of Multi-Axis Motion Drive in Nano-Positioning." under supervision of Dr. Arpita Mukherjee in Electronics & Instrumentation Group, CSIR-CMERI, Durgapur since 2nd November,2015 to 31st March 2017*
5. Worked as Assistant Professor in Electrical Engineering Dept. in Kanad Institute of Engineering and Management, Mankar since 10th October 2017 to 28th February 2019
6. Worked as Electrical Engineer in Adamas University, Barasat, since 1st March 2019 till 11th September 2019
7. Presently working as Contractual Faculty in MAKAUT,WB in Centre of Robotics & 3D Printing under School of Engineering Sciences, Haringhata, Nadia since 13th September 2019 till date. Also Worked as Guest Lecturer in Electrical Engineering Dept. in University Institute of Technology, The University of Burdwan, Burdwan since 1st August 2013 to 31st December 2013

Other Activities :

1. Actively participated in organizing Robotics Competition ROBOMAC 2020, organized by Centre of Robotics and 3D Printing, MAKAUT,WB at university campus in Haringhata
2. Arranged for Adventure Sports activity for students to secure points in their Mandatory Additional Requirement (MAR) in 2020 at Duarsini, Purulia. Total 23 students from different streams of MAKAUT,WB participated and completed the course successfully.

Ms. Trisha Chatterjee
Laboratory Assistant (Contractual)

Qualification: B. Tech in Electrical Engineering

Experiences:
1. Lab assistance (Electrical) in Robotics and 3D printing department (May,2020-Present)
2. Senior Associate in Indian Oil Tanking (Former)

Mr. Amit Karmakar
Assistant Professor

Qualification: PhD (Pursuing) from Jadavpur University, M.Tech (IIEST, Shibpur)

Experience: Junior Research Fellow in CSIR-CGCRI, Kolkata (1 yr)
Research Area: Automobile vibration and ride comfort, vehicle dynamics, Robotics

Mr. Anjan Choudhury
Assistant Professor

Qualification: M.Tech (IEM from MAKAUT
Specialization Certificate: The State University of New York, University at Buffalo is certified Digital Manufacturing & Design Technology Specialization Issuing Authority The State University of New York Issued Jun 2020 Credential ID-KDZLCCS33ZRZ

Experience: (3 yrs. of industrial exp. And 2.5 yr. of academic Exp)
1. Asst Engineer at BRG Iron & Steel, Kharagpur, Duration- 2014 to 2017
2. Guest lecturer at Dept Engineering Science and management, RCCIIT , Kolkata
3. Currently, Assistant Professor at Centre of Robotics & 3D Printing, Maulana Abul Kalam Azad University of Technology, WB

Research Area:
Supply Chain Management, Ergonomics, Digital Manufacturing and Design, Industry 4.0, Additive manufacturing, Robotics, Quadruped Robot,

Seminar:

- Certificate of Participation for five days FDP on **"Theory and Simulation on Robotics"** at NIT Patna.
- Certificate of Participation for five days workshop on **"Ergonomics in Design And engineering education"** at IIT Guwahati .
- Certificate of Participation for two days workshop on "Quality **Improvement in Products and Processes: Principles, Methods and Applications**" at IIEST Shibpur.
- Certificate of Participation for two days workshop on "**Six sigma Fundamentals and Applications**" at Jadavpur University .
- Certificate of Participation for five days workshop on "**Machine Learning with Python :A Deep Learning Approach**" at MAKAUT,WB
- Certificate of Participation for one day seminar on" Intelligent **Earth and Deep Learning "** At MAKAUT,WB
- Certificate of Participation for five days workshop on "**NBA & NAAC Accreditation**" at MAKAUT,WB
- Certificate of Participation for five days FDP Applications of 3D Printing Technology in Engineering Education" from 20/09/2021 to 24/09/2021 at AICTE ATAL

Centre of Linguistics

Professor- in- Charge: Prof. (Dr.) Sukhendu Samajdar

Introduction of the Department/Centre: August 2019

Courses Offered:

Sl no	Course offered	AICTE/ UGC	Duration	Intake	Eligibility	Enrolment Methods
1	Being an Educational service providing department the CoL offers various courses related to language and communication, soft skills development, personality development and grooming etc. to the various inhouse departments.	Both AICTE & UGC	NA	NA	NA	NA

List of Faculty:

Sl No	Name of the Faculty Member	Present Designation	Area of Specialization/Research Interest
1	Prof. (Dr.) Sukhendu Samajdar	Professor & Director, School of Natural, Applied & Social Sciences Head, Department of Materials Science & Technology Professor-in-Charge, Language Laboratory	Materials informatics, creative pedagogy, incubation & start-up as well as the role of humanities in science & technology
2	Mr. Shaswata Sengupta	Assistant Professor	Pidgins and Creoles in West Bengal

3	Mr. Sushanta Kayal	Assistant Professor	NA

Corporate Classroom Series

5 Days FDP on Scientific & Technical Writing
2-6 Nov 2020

Faculty Profile

Prof. (Dr.) Sukhendu Samajdar

Professor & Director, School of Natural, Applied & Social Sciences

Head, Department of Materials Science & Technology

Professor-in-Charge, Language Laboratory

Seminar/Webinar organized/participated in 2020-21:
- The Talk Show
- National Statistics Day
- Writing For Results: How to craft effective emails
- Smart Nanomaterials for Applications in Applied Sciences
- A Skill Set Worth a Thousand Words: Developing Communication Skills that Speak in Your Favour
- Materials Informatics - A New Paradigm for Materials Design
- Creating the best impression:An insight on how to face personal interviews
- Engineering Skills For the Year 2020 and Beyond
- Materials Science in Context of Covid 19

Workshop organized/participated in 2020-21: "The Art and Craft of Scientific & Technical Writing"

Mr. Shaswata Sengupta

Assistant Professor, Centre of Linguistics

Webinar organized:
1) Promotional/Interactive webinar series on interview preparedness titled '**The Corporate Classroom'**.
2) 5 Days Online FDP on Scientific & Technical Writing titled **"The Art and Craft of Scientific & Technical Writing".**

Webinar participated:
- Celebration National Statistics Day: Birth Anniversary of P. C. Mahalanobis on 29.06.2021
- Online Teaching and Learning on 28.06.2021

- COVID-19 vaccination: Myths and Facts on 06.06.2021

Workshop organized/participated in 2020-21:
- Organized Online Workshop series on **"How to Write Effective CVs & Cover Letters"** for the students of in-house courses.

Research Papers Published:
- Sengupta, Debjani Bhabai, Sengupta, Shaswata, 'Pidgins Among Settlers in the Titagarh Industrial Zone', International Journal of English and Studies (IJOES), Volume-2, Isssue-8, 2020, pp 21-39, ISSN: 2581-8333
- Sengupta, Shaswata, 'Babuism in the Jute Industry along the banks of the Hugli', 'International Journal of English and Studies (IJOES), Volume-2, Issue-11, 2020, pp 45-60, ISSN: 2581-8333
- Sengupta, Shaswata, 'Language Barrier as a Medium of Imprisonment in the Brick Kilns of West Bengal', 'International Journal of English and Studies (IJOES), Volume-3, Issue-4, 2021, pp 170-178, ISSN: 2581-8333

Books/Book Chapter Published:
- CBSE Smart English for Class X (Parul Prakashani, ISBN: 987-93-88325-31-8)
- A Concise Study of American Literature (Ray Book Concern)
  .

Professional Activities:
- Organized departmental promotional webinar
- Participated different webinars and workshops

Mr. Sushanta Kayal
Assistant Professor, Centre of Linguistics

Webinar organized:
1. Promotional/Interactive webinar series on interview preparedness titled '**The Corporate Classroom'**.

2. Five Days Online FDP on Scientific & Technical Writing titled **"The Art and Craft of Scientific & Technical Writing**". (2-6 Nov 2020)

Webinar participated:
- Celebration National Statistics Day: Birth Anniversary of P. C. Mahalanobis on 29.06.2021
- Online Teaching and Learning on 28.06.2021
- COVID-19 vaccination: Myths and Facts on 06.06.2021

- 5 days FDP on **"Inculcating Universal Human Values in Technical Education"** organized by All India Council for Technical Education(AICTE) from 18 January, 2021 to 22 January, 2021.

Workshop organized/participated in 2020-21:

Organized Online Workshop series on **"How to Write Effective CVs & Cover Letters"** for the students of in-house courses.

Professional Activities:
- Organized departmental promotional webinar
- Participated different webinars and workshops
- Coordinated the administrative activities of the Centre of Linguistics under the guidance of Prof. Samajdar.
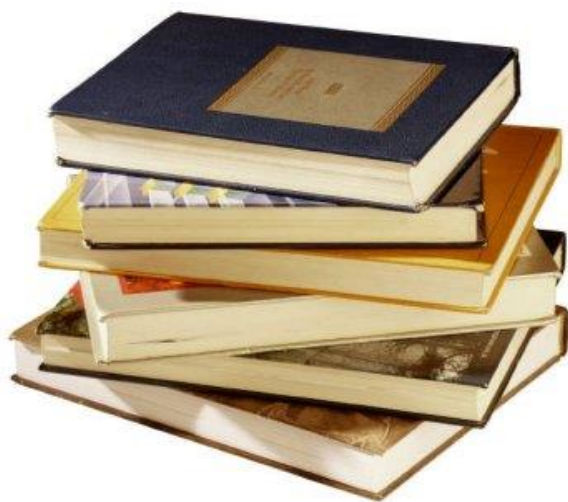
The University Library

The library was founded in 2004 with a few book racks and some donated books. Now it is a fully functional hybrid library where it is now possible to access printed items as well as the digital holdings in the form of e-books and e-journals, multimedia CDROMs and software.

The Library has more e- resources than the printed resources. It has a collection of around 34000 books among which 21000 (approx) are print books. The library has purchased around 98 new titles and 194 volumes of print books in the financial year 2020 - 2021. It also has a good collection of CDs, audio Cassettes and DVDs. The library is focusing on e-resources for multi-user access with easy access and zero maintenance cost.

The University library is member of E-Sodh -Sindhu (UGC Infonet) Digital Library consortium. The University library is getting e-database ISID, world e book library, and Annual Reviews through this consortium. It is also subscribing to anti-plagiarism software Ithenticate to maintain the mission of zero plagiarism. The university library has also purchased e-books with perpetual access from renowned publishers like McGraw-Hill, Elsevier, Springer, Pearson Education, Taylor and Francis, Oxford and Cambridge . The library has also purchased the e-collection of Annual reviews back volume.

As a part of a center of excellence, library tries to provide modern web-based services along with the traditional services like reading room, lending, photo copying services.

The library has been shifted to the library building of the Main campus of the University, ie, Haringhata Campus. Now the library is occupying the 1st floor and 3rd floor and 4th floor of the library building. Lending service , processing work and Reports section, separate stack for underprivilege section are on the 1st floor. 3rd floor is the stack room of the library. Library reading room , digital library service and PhD section is on the 4th Floor.

The library is an open access library which gives its user the facility to directly go to the rack and choose his/ her own books. The library is providing the reading room service and digital library facility to the students. The library is also keeping the newspaper and magazine section till 10 PM to fulfill the demand of the user.

The library is giving fully automated lending services to the students along with the faculty members using library management software KOHA. Every student has a login id and password to access the catalogue from user interface and reserve books. Students can also see their status. ie, whether a book is overdue or not, the reading history etc. from their account.

The library has Web OPAC (URL http://opac.wbut.ac.in) facility where all users including students, faculty members, researchers and others can browse through for information

regarding library resources from any where within and outside the campus. There is a dedicated machine for searching library resources through library portal near the entrance of the stack-cum-circulation counter to facilitate its users.

Users become aware of the library rules and regulations and how to use the services through library portal. The library alerts the user through notification   about the library programme and activities using university' s e-mail service. Since all university classrooms are projection-enabled and connected to the internet, digital resources like images of the CDs accompanying the books, e-books, e-journals of the library can be accessed from class rooms to aid the teaching.

The library is using a single interface, the library portal (http:// library.wbut.ac.in) where the information about library holdings be it the printed collection or the e collection can be obtained through the open source ILS system   KOHA. It is the first open source ILS system distributed under GNU GPL licence. Barcodes generated in-house are used to track down each printed item in the catalogue in day to day transaction. eg. Circulation. separately. The university library is completely networked. The users can access the electronic resources and the Internet through the desktops in the e-corner. As the university is connected through Intranet library resources can be accessed from any where within the campus. The library is also has Wi-Fi connectivity. Users can access the Internet from the library reading room through WI-fi connectivity from their laptops subject to authorization.

The library has taken initiative to encourage the students to read open access books and journals. The library portal has links to the open access books and journals, and National
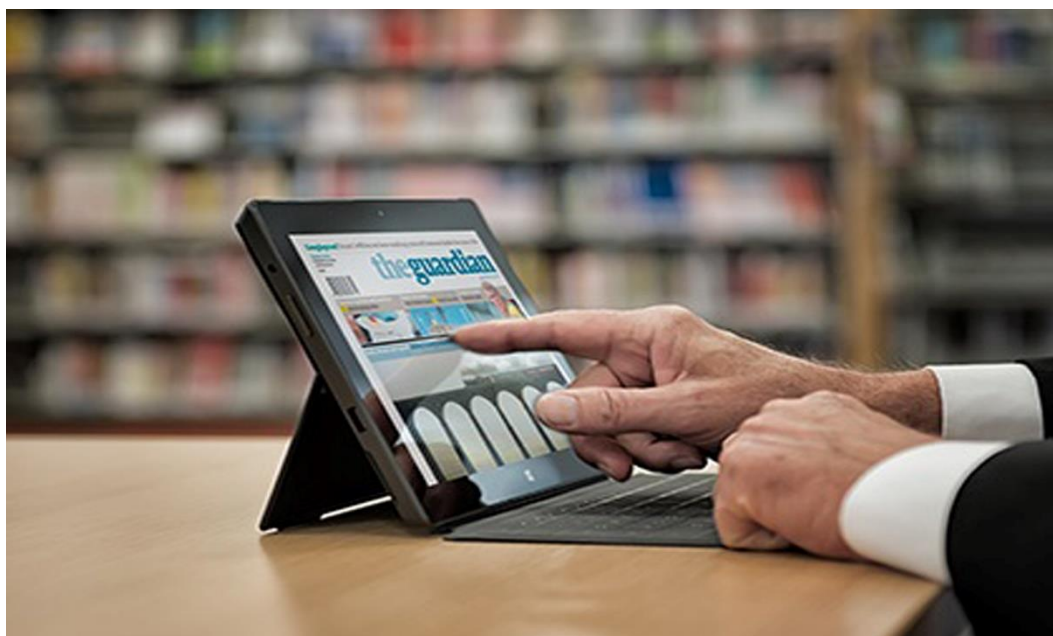
Digital Library. The university has also taken initiatives for bulk registration of students towards the membership of the National Digital Library.

The library is outsourcing the photocopying service and network printing. Photocopy can be done for Re. 1.00 a page. And printing can be done for Rs. 2.00 a page. The network printing service can be accessed from any where within the campus.

Keeping in mind the equal opportunity for all, the university library resource is open to all students and faculty members of affiliated colleges. They can use the university reading room service, can select their books and journals , copy the relevant portion and can also photocopy a limited numbers of pages. They can also use the library e-resources, download and can take print of the required portion using the networked printer. The students and faculty members only need to bring their college ID card to enter the library.

- **Books purchased in the library (2020-21) -** 98 title and 194 volume (approx)

- **Total titles available (2020-2021) –** Print books 6545 and e-books 10000 purchased and 5000 free access

- **Books available (2020-21) –** Print books 21000(approx.) nos and e-books.....10000........nos from renowned publisher like McGraw-Hill, Elsevier, Springer, Pearson Education, Taylor and Francis, Oxford and Cambridge.

- **Journals available (2020-21) –** IEL Online journal collection, Annual reviews (e-sodhsindhu consortia,) Open access Journals

- **Database available (2020-21) –** ISID database through e-sodhsindhu consortia

- **Computer & Software purchase (2019-20) –** Ithenticate – Anti-plagiarism software

- **Other facilities created from library (2019-20) –** NPTEL Video lectures available for students in CDROM, National Digital Library membership through Library website., electronic copy of text books that are available freely, Magazine and newspaper section is kept open till 10 pm for students

- **Reader's service –** Reading room service, Lending service, CAS, SDI service, access to old Question paper, reports, news clippings, bound volumes old journals, remote access using username and password, books for under privileged students

- **Number of students enrolled** – all university inhouse students, students of affiliated college can also access the books

- **Library usages** – Due to the pandemic situation students are not allowed to physical access of books. They can access e-books from their home through User name and Password.

- **Total staff in library (2020-21)** - Regular 4 Contractual 2, Total. 7 including Asst. Librarian.

Street Library in MAKAUT Campus

Street Library Movement - A Unique approach of MAKAUT,WB towards the movement of Open Library

Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal has taken an active initiative in collecting books for encouraging and inculcating book reading habits in the society through open libraries. These are termed as **Street Libraries** by the University and two of them have already been installed in University's Main Campus at Haringhata and in its Salt Lake campus. Many are to be constructed at different locations of the state of West Bengal. In the open library, one is allowed to read books and also take them home under the condition that one returns it after a certain period or replaces it with books that one owns. Thus the Street Library Movement encourages donation of books also.

A Street Library has already been built on MAKAUT's Salt Lake campus. There are about 5,000 books in this open library, built in collaboration with one of its Affiliated colleges iLead. This place has already become a book lovers' paradise. A Street Library has also been built on MAKAUT's Haringhata main campus . There are about 1000 books in this open library. This is also built in collaboration with iLead. Students, faculty and other staff are showing great interest to use this facility.

Some Glimpses of Library Inside

Authority of the University

The General Council is the supreme administrative authority of the University, chaired by the Governor of the State of West Bengal who is the Chancellor of the University. The administration, management and control of the University and the income thereof vest in the Executive Council, which controls and administers the property and funds of the University, subject to the general supervision of the General Council. The Academic Council is the principal academic body of the University. Subject to the provisions of the West Bengal University of Technology Act, 2000 and the First Regulations of the West Bengal University of Technology, it has the control of and is responsible for the maintenance of standards of learning, education, instruction, evaluation and examination within the jurisdiction of the University. The Finance Committee takes necessary action for proper management and control of the finance of the University, subject to the overall supervision of the Executive Council and General Council.

The University Administration

THE GENERAL COUNCIL

Shri Jagdeep Dhankhar, His Excellency the Governor of West Bengal and Chancellor of the University	Chairman
Prof. Saikat Maitra, Vice-Chancellor, MAKAUT,WB	Vice-Chairman
Secretary, Higher Education Dept. Govt. of WB or his Nominee.	Member
Finance Secretary, Finance Dept. Govt. of WB or his nominee	Member
Sri Arijit C. Majumdar (Retd.), IIM, Ranchi, nominee of Chairman, W.B. State Council of Higher Education	Member
President, West Bengal Council of Higher Secondary Education	Member
President, West Bengal Board of Madrasah Education	Member

President, West Bengal Board of Secondary Education	Member
Director, Indian Institute of Social Welfare and Business Management or his nominee	Member
Prof. D. Narasimha Reddy, Member UGC, nominee of Chairman UGC	Member
Prof. S. G. Bhirud, Adviser-I, AICTE, nominee of Chairman AICTE	Member
Director of Technical Education	Member
Nominee of the Chairman of the Fee Structure Committee	Member
Directors of Schools	Member
Two Senior most Professors of the Departments	Member
Two Senior most Associate Professor of the Departments	Member
Two Senior most Assistant professors of the Departments	Member
Prof. K. Chakraborty, Principal Govt. College of Engg. & Ceramic Technology	Member
Prof. Amitava Ray, Principal Jalpaiguri Govt. Engg. College	Member
Dr. Bibek Chakraborty, Principal, Purulia Government Engineering College	Member
Prof. Pranay Chaudhuri, Principal, Heritage Institute of Technology	Member

Dr. Sutapa Mukherjee, Principal, B. P. Poddar Institute of Management & Technology	Member
Dr. Goutam Mukherjee, Asso. Prof., Govt. College of Engineering & Leather Technology	Member
Prof. Sukhendu Sekher Mondal, Teacher, Cooch Behar Govt. Engineering College	Member
Dr. Biswarup Neogi, Asso. Prof, Dept. of CSE, JIS Engineering College	Member
Dr. Satyajit Chakrabarti, Director, Institute of Engineering & Management	Member
Dr. Saurabh Dutta, Professor, Dr. B. C. Roy Engineering College (MCA)	Member
One representative of officers of MAKAUT,WB	Member
Two representative of non-teaching employees	Member
Prof. Kusum Sudhakar Reddy, HoD Dept. of Civil Engg., IIT KGP, Chancellor's nominee	Member
Prof. Gairik Das, HoD - MPD and Business Projects, IISWBM, Kolkata, Chancellor's nominee	Member
Sri Kallol Dutta, Ex-Chairman & Managing Director, Andrew Yule & Company, nominee of State Govt.	Member
Dr. Abhijit Majumdar, Professor, Dept. of Physics, IIEST, Shibpur, Howrah, nominee of State Government	Member
Prof. Subhrangshu Sekhar Chatterji, Ex-Vice-Chancellor, Cooch Behar Panchanan Barma University, nominee of	Member

State Government	
Dr. Partha Pratim Lahiri, Registrar	Non-member Secretary

THE EXECUTIVE COUNCIL

Prof. Saikat Maitra, Vice-Chancellor, MAKAUT, WB.	Chairman
Vacant, Pro-Vice Chancellor, MAKAUT,WB	Vice-Chairman
Secretary, Higher Education Dept. Govt. of WB or his nominee.	Member
Secretary, Finance Dept. Govt. of WB or his nominee.	Member
Sri Pranabesh Das, Director of Technical Education.	Member
Nominee of Chairman, W.B. State Council of Higher Education.	Member
Two Senior most Professors of the Departments	Member
Two Senior most Associate Professor of the Departments	Member
Two Senior most Assistant professors of the Departments	Member
Prof. K. Chakraborty, Principal Govt. College of Engg. & Ceramic Technology	Member
Prof. Amitava Ray, Principal Jalpaiguri Govt. Engg. College.	Member
Dr. Bibek Chakraborty, Principal, Purulia Government Engineering College	Member

Prof. Pranay Chaudhuri, Principal, Heritage Institute of Technology	Member
Dr. Sutapa Mukherjee, Principal, B. P. Poddar Institute of Management & Technology	Member
Dr. Goutam Mukherjee, Associate Professor, Govt. College of Engineering & Leather Technology	Member
Dr. Sukhendu Sekher Mondal, Assistant Professor, Cooch Behar Govt. Engineering College	Member
Dr. Biswarup Neogi, Asso. Prof, Dept. of CSE, JIS Engineering College	Member
Dr. Satyajit Chakrabarti, Director, Institute of Engineering & Management	Member
Dr. Saurabh Dutta, Professor, Dr. B. C. Roy Engineering College (MCA)	Member
Prof. Kusum Sudhakar Reddy, HoD Dept. of Civil Engg., IIT KGP. Chancellors Nominee	Member
Prof. Gairik Das, Head MRM and Business Analytics, IISWBM, Kolkata. Chancellors Nominee	Member
Sri Kallol Dutta, Ex-Chairman & Managing Director, Andrew Yule & Company, Nominee of State Govt.	Member
Sri Asish Kar, Retired Executive, Andrew Yule & Company Ltd. Nominee of State Govt.	Member
Dr. Abhijit Majumder, Assistant Professor, IIEST, Shibpur, Howrah. Nominee of State Government	Member

Dr. Partha Pratim Lahiri, Registrar	Non-member Secretary

THE FINANCE COMMITTEE

Prof. Saikat Maitra, Vice Chancellor, MAKAUT, WB.	Chairperson
Vacant Pro-Vice Chancellor	Vice Chairperson
Nominee, Hon'ble Chancellor	Member
Sri Ranjit Mridha, Accounts Officer & E.O. Deputy Secretary, Higher Education Dept., Govt. Of W.B.	Member
Dr. Partha Pratim Lahiri, Registrar, MAKAUT, WB.	Member
Sri Debdatta Roy, Finance Officer, RBU, Nominee-EC	Member
Sri Sachindranath Kar, Finance Officer, Netaji Subhas Open University, Nominee-EC	Member
Dr. Atri Bhowmik, Finance Officer MAKAUT,WB.	Non-member Secretary

THE ACADEMIC COUNCIL

Prof. Saikat Maitra, Vice-Chancellor, MAKAUT,WB	Chairman
Head Department of Information Technology	Member
Head Department of Computer Science Engineering	Member
Head Department of Microelectronics & VLSI	Member
Head Department of Applied Science	Member

Head Department of Biotechnology	Member
Head Department of Bioinformatics	Member
Head Department of Forensic Science	Member
Head Department of Pharmacy	Member
Head Department of Renewable Energy	Member
Head Department of Media Science	Member
Head Department of BBA Studies	Member
Head Department of MBA Studies	Member
Head Department of Environmental Science	Member
Prof. Bikash K Chakraborty, Former Director, Saha Institute of Nuclear Physics	Member
Prof. Bijan Sarkar, Department of Production Engineering, Jadavpur University	Member
Prof. Pingali Venugopal, XLRI, Jamshedpur	Member
Dr. Arkendu Chatterjee, Principal	Member
Dr. Dipankar Sarkar, Principal	Member
Arup Dasgupta, Teacher	Member
Sabyasachi Bagchi, Teacher	Member

Agnibha Dasgupta, Teacher	Member

ADMINISTRATIVE OFFICERS

Chancellor	His Excellency Sri Jagdeep Dhankhar, Hon'ble Governor, West Bengal
Vice Chancellor	Prof. Saikat Maitra
Pro-Vice Chancellor	
Registrar	Dr. Partha Pratim Lahiri
Finance Officer	Dr. Atri Bhowmik
Controller of Examinations	Dr. Subhashis Datta
Inspector of Colleges	Dr. Swapan Maity
Information Scientist	Dr. Md. Aftabuddin
Assistant Librarian	Ms. Najmun Nessa
Assistant Registrar	Mr. Anup Kumar Mukherjee
Audit & Accounts Officer(Cont.)	Mr. Rabin Dutta
Assistant Controller of Examinations	Mr. Anil Prasad
Medical Officer	Dr. S. C. Biswas
Placement Officer(Cont.)	Dr. Anandarup Sarangi

RTI CELL

(FAA) First Appellate Authority	Dr. Partha Prratim Lahiri
(SPIO) State Public Information Officer	Sri Anup Kumar Mukherjee

Administrative Staffs

Sl. No.	Employee Name	Designation
1	Mr. Ashis Sarkar	Sr. Assistant
2	Mr. Kaushik Ghosh	Sr. Assistant
3	Mr. Pradyut Kar	Sr. Assistant
4	Mr. Sudhansu Chakraborty	Sr. Assistant
5.	Ms. Sujata Ghosh	Sr. Assistant
6.	Mr. Ajoy Bhattacharjee	Assistant
7.	Mr. Amar Kanti Ghosh	Assistant
8.	Mr. Ashim Kumar Gangopadhyay	Assistant
9.	Mr. Ashis Nandi	Assistant
10.	Mr. Dibyendu Dutta	Assistant
11.	Mr. Jayanta Das	Assistant
12.	Mr. Khorsed Munshe	Assistant
13.	Mr. Ranjan Mondal	Assistant
14.	Mr. Sagar Ratan Basu	Assistant
15.	Mr. Shamik Ghosh	Assistant
16.	Mr. Som Mauli Adhikary	Assistant
18.	Mr. Sujit Kumar Saha	Assistant
19.	Dr. Bratati Ghosh	Jr. Assistant
20.	Mr. Debasish Sarkar	Jr. Assistant
21.	Ms. Pritha Ghosh	Jr. Assistant
22.	Mr. Soumendu Ghosh	Jr. Assistant
23.	Mr. Amit Paul	Store Assistant
24.	Ms. Chumki Das	Technical Assistant
25.	Mr. Mithun Ghosh	Technical Assistant
26.	Mr. Pritimoy Sanyal	Technical Assistant
27.	Mr. Shubhashis Sengupta	Technical Assistant
28.	Ms. Sumana Chakraborty (Ghosh)	Technical Assistant
29.	Mr. Naresh Das	Driver
30.	Mr. Arnab Pal	Group D
31.	Mr. Emandi Narayan Rao	Group D
32.	Mr. Nikhil Kumar Biswas	Group D
33.	Mr. Pradip Kumar Paswan	Group D
34.	Mr. Rabindra Nath Polley	Group D

35.	Mr. Sanjoy Hazra	Group D
36.	Mr. Swarup Majumder	Group D

Other Staffs

Abhijit Bhattacharjee	Bhola Ghosh	Nakul Paswan	Saroj Das
Amar Nath Ghosh	Binay Bhunia	Palash Dutta	Shyamal Mirdha
Amlan Chakraborty	Debasish Roy	Pritam Chakraborty	Sujay Mukhopadhyaya
Anima Halder	Dinesh Kumar Shaw	Rajat Chatterjee	Sujit Kumar Roy
Arup Roy	Dipanjan Dey	Ramkrishna Nath	Sukumar Maiti
Ashim Chakraborty	Goutam Deb	Rupa Dey	Suman Sen
Ashok Das	Kaushal Nath Singh	Sadhan Mondal	Surajit Debnath
Avijit Pathak	Mahesh Prasad Gupta	Samar Naskar	Susanta Chakraborty
Bablu Banick	Manik Chandra Das	Samir Das	Swapan Lal Chatterjee
Bamdeb Jash	Manik Sardar	Sanat Bose	Swarup Pramanick
Basanta Kr. Shit	Mridul Adhikary	Sanjoy Dutta	Ujjal Kansa Banik

Staffs engaged through agency: 44 (Ultimate Digital Solution) + Brave Agency 132

CIVIL SECURITY	34	PLUMBER	3	**TOTAL 132**
EX-MAN SECURITY	22	CARPENTER	2	
HOUSE KEEPING	58	COOK	4	
MALI	8	CARETAKER	1	

Faculty (Contactual)

Assistant Professor (on contract)	52
Contractual Professor	03
Contractual Faculty	05
Adjunct Faculty	14
Total	**75**

Non-teaching Staff (Contractual)

Permanent Contractual	44
Non-teaching Contractual Support Staff	38

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A Report from the Office of the Controller of Examination, MAKAUT,WB

Activities of last one year by the Department of Controller of Examinations at Maulana Abul Kalam Azad University of Technology, West Bengal (MAKAUT,WB).

1. Examination system
   a. **Online enrollment** of students and teachers during the commencement of semester
   b. Collection of **Continuous Assessment (CA)** four times in a semester through the subject teachers concerned
   c. **Access to all internal assessments** and other data to the students and teacher login
   d. Issuance of **admit card only for eligible students** (after collection of IA of theory & practical), thus discontinuing irregularities
   e. **Online submission of examination fees** by the colleges
   f. Introduction of **online attendance & top sheet generation** system

2. Online module for capturing data of **Mandatory Additional Requirements (MAR)**

3. Online module for capturing records of **Mentoring** data through the mentors concerned

4. Online module for record of performance of students in **MOOCs** courses

5. Development and implementation of online module of **Question Bank** and collection of question from paper setters for the courses of UG & PG

6. **Generation of question papers** from the question bank and facility of onscreen moderation

7. Introduction of **online Question paper delivery system** (QPDS) in encrypted mode and password protection and feature of printing of the same just before the examination

8. **Tracking mechanism of answer scripts packets** from examination center to central hub and to scanning center through QR code scanning with specially developed android mobile app

9. Introduction of **improved version of answer scripts** with special features for digital evaluation

10. Introduction of implementation of **CCTV surveillance in the examination halls** of affiliated colleges during the end semester examinations and monitoring of the conduction of examinations from the office of the University for ensuring quality in examination process

11. Conduction of different **training programs** for different stake holders (Principal/Director, OIC, teachers etc) for introduction of different online modules and digital evaluation system

12. **Digital Evaluation of answer scripts** with live tracking of evaluation process and its statistics

13. Analysis of digital evaluation process for **improvement in quality of evaluation**

14. Introduction of **highly secure certificates** with advanced features in special stationary of online access of the certificates by scanning QR codes available in the certificates

15. Introduction of **NFC (near field communication) chip based secure certificates** with specially developed android app containing entire details of degree for the UG & PG rank holders and PhD certificates

16. Introduction of **uploading certificates in NAD** (national academic depository) by generating NAD Id of students and linking them for online access and availability of verification facility

17. **In house development of software** for conducting online examinations in MCQ mode

18. Conduction of **end semester examinations of vocational streams in online mode** and instant publication of results of such examinations

19. In house **development of software for overall monitoring of certificate, diploma & post diploma courses** with feature of online record keeping of (i) MoU, (ii) Subject experts, (iii) Syllabus, (iv) Question Bank, (v) Course commencement & completion, (vi) Question paper generation (vii) Examination

conduction, (viii) Result publication, (ix) Certificate distribution, (x) Archiving records etc

20. In house **development of software for online application of transcripts, duplicates** etc for pass out students

21. **Introduction of online applications of transcripts**, duplicates, verification etc with feature of online payments facility from any place of the world

22. Development of **online academic module of systematic development of curriculum & syllabi** with futures of examination scheme and linking with the outputs of digital evaluation process for quality improvement of curriculum (under planning & development)

23. Planning and introduction of **online monitoring and evaluation of student projects and PhD thesis** with feature of plagiarism checking and online archiving (in process)

24. Planning for **new process in online application and seat allotment for CET & JEMAT** candidates to ensure improved & transparent admission process from the academic year 2020-21

25. The following activities/initiatives are taken during the lockdown period due to Covid-19 pandemic under my initiative and support and direction from University authorities.

26. Conduction of **JEMAT & PGET in online mode** in 2020-21

27. Conduction of **CET in centralized locations** in 2020-21

28. Conduction of **centralized counseling for admission in CET** in 2020-21

The following activities are coordinated during the lockdown period by the Department of Controller of Examinations.

1. **Online Academic Activities of the colleges during lockdown period:** In order to encourage the colleges and explain the possibilities, we had conducted meetings with all the affiliated colleges taking about 10-12 colleges at a time in Zoom cloud meeting platform and guided them regarding different scope and advised them to keep record of the online activities of the students in a prescribed format and subsequently

developed online reporting provision in the examinations portal (www.makautexam.net) of the university and could be accessed by the college admin, individual faculties and students through their login. Both faculties and students are advised to upload their daily activities (formats are enclosed in **annexure**) in the university portal (http://makautexam.net/pdf18/2020/online_activity.pdf). Periodical reviews were done.

It is found that till May 2021, almost **1.75 lakhs record of classes** were reported by the faculties where **about 60 lakhs students attended** the class. Reports submitted by the **students also reported about 20 lakhs records** during this period.

All records are made available with the college administration and reviews on the uploaded activities were also made through the colleges.

2. **Special MAR activities:** Apart from academic activities we have also prescribed a special list of MAR (Mandatory Additional Requirements) (enclosed in **annexure**) which would help students to engage themselves in productive extracurricular activities during lockdown period and earn essential points of MAR during staying home in this period and provision of uploading the same in the portal was also developed (http://makautexam.net/pdf18/2021/Special_mar_period_MAKAUT.pdf).

3. **Online internship and Virtual Lab:** It is also advised to all concerned that practical classes should be conducted online taking help of virtual lab (http://www.vlab.co.in/) or similar platform. Projects of the students should be supported through online mode. Internship programs of this semester should also be taken care alternatively through online activities.

Online meetings with the convenors of Board of Studies wre conducted to formulate strategy to take students internship in online mode and mapping of virtual lab experiments with the experiments prescribed in the curriculum.

List of prescribed internship projects as proposed by the Board of Studies are published (enclosed as annexure). Mapping of virtual labs which are prescribed by the Board of Studies are also published. However, there are some mappings yet to be finalised by the BoS concerned.

4. **Facilities & participation in online activities:** Though exchange of academic materials through email and WhatsApp is very common, a large number of faculties are also using Zoom online platform, but other platforms like Google class room (https://edu.google.com/products/classroom/?modal_active=none), Canvas (https://canvas.instructure.com/login/canvas) are also used by many faculties. Some affiliated/autonomous colleges have are making their own facility for this purpose. During the meetings in Zoom platforms with the affiliated colleges, it is reported by the

representative of the affiliated colleges that response from the students are very good and sometime the participation is more than regular class attendance.

5. **Activities of School Connect Program:** University also runs a programme called 'School Connect' through which connected schools were taken into Zoom Cloud meeting and initiatives are taken to support them so that online classes could also be conducted in online mode. Schools would be supported through training on online classes, training on technical skills etc. Schools were also encouraged to introduce activities for the students of the school which can be done from home and in turn they can earn points. Provision of awarding the best activities and innovative activities are also kept for consideration.

6. **Learning Management System (LMS) of the University:** For the In-house and partner/ off campus programs of the University, we have developed on separate platform viz. MAKAUT-MyPerfectice portal (https://makaut.myperfectice.com/) where all faculties and students are enrolled/on boarded. Online classes are now being taken through the platform apart from other platforms used earlier. Periodic assessments/tests/quiz etc are conducted through this platform by preparing question papers. Performance analysis of individual students in different parameters is also done through this platform. Online text and video materials are also provided through this online platform. Recording of the classes taken were also kept there.

7. **Online course platforms and course taken by University persons:** We also have tied up with Coursera (https://www.coursera.org/) and Simplilearn (https://www.simplilearn.com/) for allowing faculties and students to take courses at free/ very subsidized rate apart from encouraging them to take courses from other different online platforms including Swayam, NPTEL etc. Faculty induction program in Swayam platform is also under active consideration. Other online platforms like edex, udemy are also popular. Many of University officers, faculties and staff had taken course through these platforms and course completion certificates.

8. **Provision of MoU with Coursera (Coursera for campus):** University is in active consideration of the proposal of the Coursera to take bulk annual licenses for the students and faculties of the affiliated colleges for access of unlimited courses in a highly subsidized rate. Apart from the access of courses, there would be provision for students for online project execution through the platform and faculties would be able to develop online course through the platform.

9. **Credit transfer scheme through online courses:** On April 28 2020, AICTE has published under heading "MAPPING OF NPTEL COURSES TO AICTE MODEL CURRICULUM on Swayam Platform" where many courses available in AICTE model curriculum in engineering programs are mapped with the online courses available through NPTEL on Swayam platform.

   On analysis of the contents, it is found that in **8 engineering programs, 287 courses are mapped with 378 online courses**. The percentage of content mapping is also mentioned which is always more than 70% and 100% most of the cases. The summary and details mapping is enclosed (please see **annexure**) herewith.

   Academic Council, in its meeting dated May 13, 2020 has accepted the proposal of credit transfer for all the courses as published by AICTE. Provision of further mapping of courses with other national/ international platforms is in the process so that some portion of the curriculum could be taken through online mode in line with the decision of UGC/AICTE.

10. **Provision of Credit transfer scheme in UGC courses:** UGC, vide F.No. 1-8/2017(Swayam Board) dated 19th May 2020 has published lists of 82 UG courses and 42 PG courses mapping with the online courses available in the swayam platform. Provision of credit transfer for non-AICTE/UGC courses would be also explored from swayam and other national/ international platforms from the next academic session.

11. **Mode of End Semester Examinations:** On the basis of resolution of the meeting with all the conveners of Board of Studies dated 05.05.2020 (04.30 pm) and decision of the Academic Council (agenda no 3, meeting dated 13.05.2020), it is decided that in view of Covid-19 pandemic, the end semester examination of all the final year students of all courses in even semester 2020-21 would be conducted CBT/online mode.

    The examination would be in MCQ mode with question of 1 mark (30 numbers) and 2 marks (20 numbers) with defined difficulty level of easy, medium and hard spread through different chapters/modules as prescribed by the paper setter/moderators.

    Appropriate software is developed to collect question bank from the faculties through online portal and provision of moderation of the question bank online by the moderators. Final question would be auto generated by the computer as per rule defined by the paper setter/moderator. There would be provision of conducting remedial/supplementary examinations from the same question bank.

    Examination for all final year students would be conducted in one month from the opening of the colleges (closed due to Covid-19 pandemic) as per directive of the government. Classes for other semesters would continue after opening of the colleges and decision on conducting examination of the other semester would be taken in due course of time.

12. **Successful implementation of Digital Evaluation System (DVS):** In the odd semester 2020-21, University had introduced online evaluation of answer scripts of all end semester examinations through digital evaluation system. Total 6,53,774 number of scripts were evaluated online and results are published. Not a single script was evaluated manually in during the process. There had been participation of more than 3100 faculties.

The review process of answer scripts would also be processed in online mode. However, the process would be initiated after opening of the colleges for easy processing of application and fees transfer by the students and colleges.

13. **Introduction of Digital Transcripts/Duplicates:** Department of Controller of Examinations had introduced the provision of issuance of transcripts, duplicate mark sheet/certificates through online portal from January 2020. The facility is developed by the resources of the department. This facility has become very useful all huge number of pass-out students residing different parts of the country and abroad. The duplicate documents are sent through the postal system.

However, during Covid-19 global pandemic and lockdown situations, provision of issuance of digital version of transcripts to the organization concerned in introduced. Therefore even during the last three months during the lockdown period, we are able to keep the facility functional.

14. **Online verification and digital certification:** Verification of academic documents was also made online and provision for issuance of digital documents is introduced during lockdown period for the interest and benefit of the stake holders.

15. **Report of preparation for online/CBT examinations and alternatives:** Software for preparation of MCQ bank online is developed and assignment for question bank/paper setter is issued to about 450 teachers for all the final year examinations. For major number of subjects, we have received question bank. Moderation of the question bank by the assigned moderators through online access is in process. After question banks are moderated we would be able to generate multiple sets of question papers based on the logic defined by the paper setters / moderators. In case of exceptional situation, alternative possibilities of holding examinations other than CBT mode would be explored or results could be prepared based on the internal assessments and other components in line with directive of the UGC/ AICTE/ Government.

16. **Introduction of assignment-based evaluation**

DATA

Affiliated Colleges Result Status:

Odd Semester 2020-21			
AICTE Courses			
Course	**Appeared**	**Passed**	**Backlog**
Bachelor of Technology	87319	86418	901
Bachelor of Pharmacy	5849	5796	53
Bachelor of Architecture	435	411	24
Bachelor of Hotel Management & Catering Technology	633	600	33
Master of Technology	763	728	35
Master of Computer Applications	1798	1783	15
Master of Business Administration	2116	2082	34
Master of Pharmacy	374	374	0
Grand Total	**99287**	**98192**	**1095**
Non-AICTE Courses			
Course	**Appeared**	**Passed**	**Backlog**
Bachelor of Computer Applications	17904	17556	348
Bachelor of Optometry	1580	1558	22
Bachelor of Science	7390	7144	246
Bachelor of Travel & Tourism Management	334	330	4
Bachelor of Hospitality Management	190	145	45
Bachelor in Business Administration	11198	10967	231
BBA in Hospital Management	5559	5403	156
Bachelor in Sports Management	236	228	8
Bachelor of Supply Chain Management	49	44	5
Bachelor of Vocational Courses	276	214	62
Master of Science	924	892	32
Master of Philosophy	16	15	1
Master in Hospital Administration	563	556	7
Bachelor of Management Studies	10	10	0
Master of Optometry	202	198	4
Master of Public Health	94	94	0
Master of Travel and Tourism Management	40	40	0
Grand Total	**46565**	**45394**	**1171**

Even Semester 2020-21			
AICTE Courses			
Course	**Appeared**	**Passed**	**Backlog**
Bachelor of Technology	73735	72408	1327
Bachelor of Pharmacy	5139	4994	145
Bachelor of Architecture	389	368	21
Bachelor of Hotel Management & Catering Technology	562	553	9
Master of Technology	704	693	11
Master of Computer Applications	1670	1668	2
Master of Business Administration	1923	1902	21
Master of Pharmacy	370	369	1
Grand Total	**84492**	**82955**	**1537**
Non-AICTE Courses			
Course	**Appeared**	**Passed**	**Backlog**
Bachelor of Computer Applications	14860	14748	112
Bachelor of Optometry	1428	1419	9
BBA in Hospital Management	4716	4667	49
Bachelor of Science	6638	6497	141
Bachelor of Travel & Tourism Management	307	297	10
Bachelor of Hospitality Management	85	73	12
Master of Science	882	790	92
Bachelor of Science	33	33	0
Bachelor in Business Administration	8971	8842	129
Bachelor in Sports Management	210	208	2
Master in Hospital Administration	547	543	4
Bachelor of Management Studies	10	10	0
Master of Optometry	100	97	3
Master of Public Health	44	43	1
Master of Travel and Tourism Management	19	19	0
Bachelor of Vocational Courses	265	215	50
Bachelor of Supply Chain Management	32	32	0
Grand Total	**39147**	**38533**	**614**

In-house Result Status

Odd Semester 2020-21			
AICTE Courses			
Course	**Appeared**	**Passed**	**Backlog**
Bachelor of Technology	350	343	7

Even Semester 2020-21			
AICTE Courses			
Course	**Appeared**	**Passed**	**Backlog**
Bachelor of Technology	336	332	4
Master of Business Administration	110	108	2
Master of Technology	336	298	38
Master of Pharmacy	28	27	1
Grand Total	**810**	**765**	**45**
Non-AICTE Courses			
Course	**Appeared**	**Passed**	**Backlog**
Bachelor in Business Administration	159	122	37
Bachelor of Travel & Tourism Management	1	1	0
BBA in Hospital Management	115	115	0
Bachelor of Computer Applications	196	190	6
Bachelor of Science	1910	1816	94
Master in Hospital Administration	3	3	0
Master of Science	182	97	85
Grand Total	**2566**	**2344**	**222**
Master of Business Administration	110	109	1
Master of Technology	347	338	9
Master of Pharmacy	28	28	0
Grand Total	**835**	**818**	**17**
Non-AICTE Courses			
Course	**Appeared**	**Passed**	**Backlog**
Bachelor in Business Administration	170	150	20
BBA in Hospital Management	126	118	8
Bachelor of Travel and Tourism Management	1	1	0
Bachelor of Computer Applications	206	190	16
Bachelor of Science	2044	1983	61
Master in Hospital Administration	3	3	0
Master of Science	184	166	18
Grand Total	**2734**	**2611**	**123**

Online Credentials:

Year	2020-2021
Transcripts(WES)	1029
Transcripts(Online)	1625
Verification	1148
Duplicate GC & Certificates	544
Certificates Attestation	86
Others (Rank Certificates, Provisional Degree Certificates, Backlog Certificates, Syllabus Certification, DGPA Conversion Certificates, CGPA Certificates)	250

Centre for Collaborative Programmes, Training & Research

Programme Period Set, Syllabus, MCQ Questions uploaded on portal, Subject Expert, Students Enrolled by Collaborative Partners, Internal Marks uploaded for Continuous Assessment, Online Exam Conducted and Result Published.	
Collaborative Partners	24
Programmes Introduced	125
Result Certificates Issued	160
Online Exam Conducted	164

The Challenge to Reform Engineering Education in the Context of Global Economic Scenario

Amitabha Sinha (Director Academic Reforms)

The new paradigm for engineering education necessitates to keep students at the cutting edge of technology and requires a balance among domain knowledge clubbed with experimentation & design, knowledge about changes in the society and market driven economy. There are considerable concerns among different stakeholders in various disciplines of engineering schools that retaining old or traditional thoughts and mindset by engineering Institutes/schools may place engineers playing minor roles in the future and cause difficulties in adapting rapidly changed global market scenario. However, it also needs to be kept in mind that this path of transition from the old to the new paradigm may not be trivial.

In the context of our country, it is fact that barring a handful numbers of Institutes of National importance like IITs and IISC, majority of our universities are faced with financial pressures while the urge to make the change lies mostly with those who oppose the change. This situation, coupled with the fact that there is no specific prescription for making this challenge to change. Still, a number of technological universities/schools have been making attempts for significant changes by adapting innovative approaches in their different undergraduate and graduate programs. It is needless to mention that established scientific methodologies and knowledge gained should be made useful for engineering Institutes/schools to innovate & devise new program or methodologies that fit in the present scenario.

This article aims for a review study of some of the salient attributes cited by renowned academicians for framing new methodology and conclude with balanced teaching learning process which promotes innovative ideas that best matches with the fast-growing technological changes in the context of global market scenario for future reform initiatives in technological universities/schools in our country (India).

Reforming engineering education to a new paradigm shift started in the early 1990s, by the National Science Foundation (NSF), U.S.A [1,2] with an aim to keep the engineering education on the track that matches with the effect of globalization. Realizing the New Paradigm for Engineering Education, in Engineering Foundation Conference, held in 1998 (EFC'98), University of South Carolina, and University of Washington, added further stimuli to reform engineering education

Finally, Accreditation Board for Engineering and Technology (ABET) introduced the criteria of Engineering education in 2000 which has been accepted worldwide.

National Academy of Engineering (U.S.A.), described engineering as creative and innovative designing but was constrained by nature, by cost, by concerns of safety, reliability, environmental impact, manufacturability, maintainability, and many other including societal impact. Salient

attributes of the New Engineering Education Paradigm have been stressed in many literature. These attributes have been modified to reflect the industrial perspective. They are:

1) Encouragement of diverse student academic backgrounds and faculty dedicated to developing emerging professionals;

2) Emphasize on mathematics and scientific knowledge foundation with engineering practices

3) Maintenance of regular, well-planned interaction with industry – including industry-based projects

4) Integration of subject matter, concepts, issues and principles – including relationships to earlier subjectmatter

5) Emphasis on inquiry-based learning and preparation for lifelong learning with much less dependence on lectures;

6) Stress on integrative, systems thinking, coping with change

7) Communications skills (listening, speaking, reading, and writing), teamwork and group problem-solving skills (from identification through analysis and resolution);

8) Focus on design issues involving life-cycle economics, environmental impact, sustainable development, ethics, timeliness, quality, health & safety,

9) Manufacturability, maintainability, social, legal, standards and ad hoc concerns.

Even though it is true that the details of procedure, application and execution in some of the list of attributes may change over time, programs that reflect these attributes will make reformed engineering graduates to face an unpredictable future with confidence. This in turn will help the society (or the world) where they will live. So, it is obvious that students attending universities/schools with programs that do not reflect these attributes will be lagging behind and finally they will lose interest in attending their schools. This leads to a disaster. As an analogy, just as a lack of diversity can cause disaster during downturns in the economy (like pandemic for an example), lack of flexibility (over specialization) in the engineering disciplines can lead to a disaster. This phenomenon was well addressed in Washington accord and a new Engineering education was recommended for Engineering with interdisciplinary and "all-round" abilities.

Globalization has made the market competitive and product needs to be highly flexible, cost effective and capable of offering high performance. So, the graduates in the disciplines of engineering & technology should be highly innovative so that they are able to address these various challenges of the global market. Hence, expectation from "All-rounded" engineers are much more and the focus should be on outcome based education where outcome of the course should be clearly specified to the learners and knowledge that will be imparted must be translated to skill. Unfortunately, students who are deprived to get this modern outcome-based education from their respective schools/Institutes will be left behind and will have no market value. Until recently, students used to continue to attend such academic institutions is not due to the fact that they liked very much rather they had adjusted to and accepted the condition

as "normal," not realizing that they have become redundant. However, the dual effects of globalization and pandemic in recent times, have made the students worldwide more matured. However, the transition from the old to the new paradigm is non-trivial since making the change lies mainly with those who feel paradigm change as threat or those who are unable to give up their traditional age-old views.

Traditionally Curriculum for Engineering education has been designed in such a fashion that the importance of theoretical as well as practical classes are almost balanced so that whatever the students learn at theoretical classes will be validated in practical class. This will enhance the understanding of the subject and will create interest among students. Apart from the lab classes project and dissertations is also one of the most important part of engineering curriculum. This if is carried on following a proper scientific approach with a clear vision, the knowledge level as well as the innovation ability of the student can be elevated to a great extent.

However, in many cases it is found that students are forced to do the project work according to whims and fancies of the concerned supervisors. Prior to offering projects to the students, if they are reviewed by a forum consisting of industry experts, eminent faculty members of different universities on the basis of following criteria:

1) Objective (Motivation behind the Project)

2) Relevance

3) Applications and

4) Deliverables (expectation),

then the objective of the project will have many fold gains and will help towards the development of knowledge, skill and design expertise of the students. So, it is amply clear that a balanced strategy is the need of the hour and the clear indication is that the focus should be on students centric and the commitment should be on teaching as well as in research. In a developing country like India, to sustain the economic growth, we have to emphasize more on innovation as well as skill development and this can be done by balanced education system in our universities/schools to produce quality graduates in all levels.

References:

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2. Wulf, William A., "The Urgency of Engineering Education Reform," The Bridge, Vol. 28, No. 1, 1998, pp. 4-8.

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Foundation, pp. 1-13.

4. American Society for Engineering Education Deans Council and Corporate Roundtable, The Green Report: Engineering Education for a Changing World, Washington, DC: American Society for Engineering Education, October 1994.

5. National Research Council's Board on Engineering Education (BEEd), Engineering Education: Designing an Adaptive System, National Research Council Report, Washington, DC: National Academy Press, 1995

Research, Awards and Scholarships

List of Ph.D. Awardees, 2020

S/L	Name of Candidate	Title of the Thesis	Discipline	Supervisor	Joint/ Associate Supervisor	Date of Viva-Voce
1	Piya Patra	MOLECULAR MODELING AND DESIGN TOWARDS UNDERSTANDING MICROSCOPIC INSIGHTS OF BIOMOLECULAR STRUCTURE AND FUNCTION	Bio informatics	Prof. Raja Banerjee	Prof. Jaydeb Chakrabarti (Joint supervisor)	29th June, 2020
2	Hirak Jyoti Chakraborty	COMPUTATIONAL CHARACTERIZATION OF LANTIBIOTICS AND DEVELOPMENT OF LANTIBASE – A COMPREHENSIVE RESOURCE	Bioinformatics	Dr. Abhijit Datta		28th November, 2020
3	Sasti Gopal Das	APPLICATION OF MACHINE LEARNING TECHNIQUES FOR ANNOTATION AND ANALYSES OF MICRO RNAs	Bioinformatics	Dr. Abhijit Datta		28th November, 2020
4	Swati Maiti	TOXICOLOGICAL STUDY OF HAIR DYE AND ITS BIOREMEDIATION	Biotechnology	Dr. Mukesh Singh		16th March, 2020
5	Jyotirmoy Rakshit	Study the Functional aspect of Deferoxamine against oxidative stress induced neurotoxicity by modulating Apoptotic and non-	Biotechnology	Dr. Jaya Bandyopadhyay		5th June, 2020

		Apoptotic pathways				
6	Poulami Majumder	STUDIES ON GENETICS OF AGGRESSIVE AND CHRONIC PERIODONTITIS	Biotechnology	Prof. Subrata Kumar Dey	Dr. Sujay Ghosh (Associate supervisor)	1st July, 2020
7	Priyanka Ghosh	INVESTIGATION OF GENETIC RISK FACTORS FOR CONGENITAL HEART DEFECTS IN DOWN SYNDROME	Biotechnology	Prof. Subrata Kumar Dey		1st July, 2020
8	Kunal Biswas	INVESTIGATION ON THE PHYSICO-CHEMICAL ASPECT OF GRAPHENE FOR BIOCIDAL AND BIOSENSING APPLICATIONS	Biotechnology	Dr. Jaya Bandyopadhyay	Prof. Debashis De (Joint Supervisor)	31st May, 2021
9	Swati Sinha	Study of Interaction Properties of Synthetic Oligonucleotides with Carbon Nanotubes and Their Impacts on *Caenorhabditis elegans*	Biotechnology	Dr. Jaya Bandyopadhyay	Prof. Angsuman Sarkar (Joint Supervisor)	04th June, 2021
10	Moutushi Singh	SOME STUDIES ON COMPUTER NETWORKING & DATA SECURITY	Computer Science & Engineering	Dr. Koushik Majumder	Dr. Subir Kr. Sarkar (Associate supervisor)	12th March, 2020
11	Deepsubhra Guha Roy	QUALITY OF SERVICE AWARE OFFLOADING STRATEGIES IN MOBILE CLOUD COMPUTING	Computer Science & Engineering	Prof. Debashis De		28th April, 2020

		TOWARDS INTERNET OF THINGS				
12	Ramesh Saha	"STUDY ON QOS PROVISIONING OF REMOTE HEALTHCARE MONITORING USING WBAN AND VANET "	Computer Science & Engineering	Dr. Suparna Biswas		16th June, 2021
13	Arunava Bhattachar yya	*PROCESSING OF ALL OPTICAL DATA AND INFORMATION USING SOA-ASSISTED INTERFEROMETRIC SWITCHES*	Computer Science and Engineering	Dr.. Dilip Kumar Gayen	Dr.Tanay Chattapadh yay (Joint supervisor)	3rd December, 2020
14	Sudakshina Dasgupta	*ENERGY AWARE INTELLIGENT CLUSTERING OF HIERARCHICAL WIRELESS SENSOR NETWORK*	Computer Science and Engineering	Prof. Paramartha Dutta		11th January, 2021
15	Sahabul Alam	*BIO-INSPIRED WIRELESS SENSOR NETWORK DESIGN*	Computer Science and Engineering	Prof. Debashis De		27th January, 2021
16	Soumyajit Goswami	Power Component Measurements using Soft Computing Techniques	Electrical Engineering	Prof. Arghya Sarkar	Prof. Samarjit Sengupta (Joint supervisor)	3rd January, 2020
17	Subir Das	STUDY AND ANALYSIS OF ABSOLUTE ENCODER FOR MEASUREMENT OF VARIOUS INDUSTRIAL PARAMETERS	Electronics & Communicatio n Engineering	Dr. Himadri Sekhar Dutta	Dr. Badal Chakraborty (Joint supervisor)	10th December, 2019
18	Abhijit	STUDIES ON mm-	Electronics &	Dr. Maitreyi	Dr. Moumita	13th

	Kundu	WAVE PROPERTIES OF WIDE BAND GAP SEMICONDUCTOR BASED p+-i-n+ DIODES OPERATING AS HIGH-SPEED RF SWITCH AND PHOTO-DETECTOR	Communication Engineering	Ray Kanjilal	Mukherjee (Joint supervisor)	December, 2019
19	Avali Ghosh	Analysis and Simulation of Crosstalk in High Speed And High Frequency Printed Circuit Board Design	Electronics & Communication Engineering	Prof. Sisir Kr. Das		12th June, 2020
20	Surajit Bari	*Modelling and Simulation Study of Nano-Scale MOSFETs For Low-Power VLSI Circuit Applications*	Electronics & Communication Engineering	Prof. Angsuman Sarkar	Prof. Debashis De (Joint supervisor)	20th June, 2020
21	Biswajit Baral	*Performance Investigation of Advanced Nanoscale Devices: An Analytical Modeling and Simulation study*	Electronics & Communication Engineering	Prof. Angsuman Sarka	Prof. Debashis De (Joint supervisor)	20th June, 2020
22	Sudhansu Mohan Biswal	A Study on Linearity and Radio Frequency Performance Analysis of Nanoscale Devices	Electronics & Communication Engineering	Prof. Angsuman Sarka	Prof. Debashis De (Joint supervisor)	4TH July, 2020
23	Somali Sikder Sanyal	DESIGN, PERFORMANCE ANALYSIS AND APPLICATION OF ONE AND TWO-DIMENSIONAL CODES IN OPTICAL CODE DIVISION MULTIPLE ACCESS	Electronics & Communication Engineering	Dr. Shila Ghosh		26th July, 2020

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		SYSTEM				
24	Rajesh Dey	STUDIES ON ADAPTIVE CONTROL OF NONLINEAR SYSTEMS FOR DESIRED RESPONSE	Electronics & Communication Engineering	Dr. Achintya Das		07th April, 2021
25	Debarati Dey	Study of Electronic Properties of Electrically Doped Nanoscale Devices using First Principle Approach	Electronics & Communication Engineering	Prof. Debashis De		07th June, 2021
26	Protik Basu	DEVELOPING A FRAMEWORK FOR LEAN MANUFACTURING IMPLEMENTATION IN THE INDIAN CONTEXT	Industrial Engineering & Management	Dr. Pranab K Dan		30th March, 2021
27	Barnali Chaudhuri	MODELING FOR OPTIMAL CELL DESIGN IN CELLULAR MANUFACTURING SYSTEMS CONSIDERING MULTIPLE PRODUCTION FACTORS	Industrial Engineering and Management	Dr. Pranab K. Dan	Dr. Rabin K. Jana (Joint supervisor)	28th February, 2020
28	Nibir Khawash	An Assessment of Marketing Culture, Service Quality and Destination Loyalty in Tourism Sector in India	Management	Dr. Arup Kumar Baksi		6th February, 2020
29	Arindam De	ENTRY OF LARGE RETAIL PLAYERS AND ITS IMPACT ON INDIAN CONSUMERS	Management	Dr. Diptendu Simlai		13th February, 2020

30	Meghdoot Ghosh	SERVICE QUALITY PERCEPTIONS AND THE FACTORS AFFECTING CUSTOMER SATISFACTION IN THE INSURANCE SECTOR IN WEST BENGAL	Management	Dr. Diptendu Simlai		2nd March, 2020
31	Surajit Das	A COMPARATIVE STUDY OF IFRS AND INDIAN ACCOUNTING STANDARD IN THIRTY TOP COMPANIES IN INDIA	Management	Dr. Tapash Ranjan Saha		2nd March, 2020
32	Sandip Nandi	COMPARATIVE ANALYSIS OF FDI AND PORTFOLIO INVESTMENT IN INDIA DURING 2005-2015	Management	Dr. Tapash Ranjan Saha		2nd March, 2020
33	Debasri Dey	DEVELOPMENT OF A BUSINESS-INTELLIGENCE BASED SUPPLY CHAIN MANAGEMENT FRAMEWORK FOR THE AUTOMOBILE SECTOR	Management	Dr. Deepankar Sinha		16th March, 2020
34	Jhilam Rudra De	A STUDY ON THE CAREER EXIT PATTERN OF THE WOMEN PROFESSIONALS IN THE PRIVATE HOSPITALS IN KOLKATA	Management	Dr. Arunava Narayan Mukherjee		16th March, 2020
35	Sanghita	DETERMINANTS OF CUSTOMERS'	Management	Dr. Indrajit		17th April, 2020

	Roy	ACCEPTANCE OF ELECTRONIC PAYMENT AND CLEARING SYSTEM IN BANKING SECTOR		Sinha		
36	Sandip Chattopadhyay	Relating Investor Psychology to Macroeconomic Parameters & Stock Market Behaviour - An Empirical Study	Management	Dr. Ranjan Das Gupta		12th April, 2021
37	Reeti Debnath (Mazumda)	Perceived Differences of Hospital Services Among Support Staff, Indoor Patients and Their Family Members Towards Government and Private Hospitals	Management	Prof. Sumati Ray		19th April, 2021
38	Utpal Sarkar	DEVELOPMENT OF SOME MATHEMATICAL FUZZY MODELS FOR THE CONTROL OF INVENTORIES AND SUPPLY CHAINS OF PHYSICAL GOODS	Mathematics	Dr. Arun Kumar Jalan	Dr. Bibhas Ch. Giri (Joint supervisor)	10th January, 2020
39	**Prasun Kumar Santra**	*MODELING AND ANALYSIS OF PREY-PREDATOR SYSTEM INCORPORATING REFUGE CONCEPT*	Mathematics	Dr. G. S. Mahapatra		11th January, 2021
40	Manas Kumar Saha	INVESTIGATION ON THE INFLUENCE OF DIFFERENT PROCESS VARIABLES ON THE QUALITY OF STAINLESS STEEL CLADDING ON CORROSION PRONE	Mechanical Engineering	Dr. Santanu Das		11th June, 2021

		STEELS				
41	Amitava Roy	STUDY OF VARIOUS ROUTES OF ADMINISTRATION AND PHARMACEUTICAL FORMULATIONS FOR ENHANCEMENT OF SYSTEMIC BIOAVAILABILITY OF CURCUMIN	Pharmaceutical Technology	Dr. Arnab Samanta		12th February, 2020
42	Mrityunjoy Majumdar	STUDY OF WOUND HEALING ACTIVITY OF DIFFERENT FORMULATIONS OF NIGELLA SATIVA SEED EXTRACTS AND ITS ACTIVE CONSTITUENTS	Pharmaceutical Technology	Dr. Arnab Samanta		12th February, 2020
43	Sougata Jana	DEVELOPMENT AND EVALUATION OF BIOPOLYMER BASED PARTICULATE DRUG DELIVERY SYSTEMS	Pharmaceutical Technology	Dr. Kalyan Kumar Sen		11th March, 2020
44	Prabir Kumar Datta	*Application of Adsorptive Bubble Separation Technology in Removal of Toxic or Recover of Medicinally valuable waste pollutants from Pharmaceutical or chemical industry*	Pharmaceutical Technology	Dr. Amitava Ghosh	Dr. Goutam Mukhopadhyay (Associate supervisor)	15th July, 2020
45	Moitreyee Chattopadhyay	PHARMACOLOGICAL AND TOXICOLOGICAL INVESTIGATIONS OF ISOLATED EXTRACTS FROM ROTTEN RICE CONTAMINANT IN	Pharmaceutical Technology	Dr.. Gautam Kumar Bagchi	Prof. Malaya Gupta (Joint supervisot)	4th December, 2020

		EXPERIMENTAL ANIMALS				
46	Rana Datta	*TOXICOLOGICAL STUDIES OF LEAVES OF PTEROSPERMUM ACERIFOLIUM (L.) WILLD AFTER ACUTE, SUB-ACUTE AND CHRONIC ADMINISTRATION*	Pharmaceutical Technology	Dr. Sankhadip Bose		8th January, 2021
47	Soumya Chatterjee	UNDERSTANDING THE PATTERN OF COMPLEX DYNAMICAL PROCESSES BY ADVANCED STATISTICAL ANALYSIS	Physics	Dr. Indranil Mukherjee		19th December, 2019

Ph.D. Enrolled/Registered Student (01.04.2020-31.03.2021)

Sl No	Name	Subject	Enrollment no	Date	Supervisor	Co supervisor
1	Samir Patra	Biotechnology	PHD/TECH/BTE001/2020	05.10.2020	Dr. Mukesh Singh	Prof. Sovroma Gupta
2	Asiruddin Seikh	Ceramic Technology	PhD/TECH/CRT001/2020	05.10.2020	Dr. Barun Kumar Sanfui	
3	Amit Kumar Mukherjee	Chemical Engineering	PHD/TECH/CHE001/2020	05.10.2020	Dr. Radha Das	
4	Srikumar Bhattacharya	Civil Engineering	PHD/TECH/CIE001/2020	05.10.2020	Dr. Arup Saha Chaudhuri	
5	Somsubhra De	Civil Engineering	PHD/TECH/CIE002/2020	05.10.2020	Dr. Arup Saha Chaudhuri	
6	Farah Sarmeen	Civil Engineering	PHD/TECH/CIE004/2020	05.10.2020	Dr. Santanu Bhanja	
7	Subhadeep Mondal	Civil Engineering	PHD/TECH/CIE005/2020	05.10.2020	Prof. Tapas Sadhu	

8	Labani Nandi	Civil Engineering	PHD/TECH/CIE006/2020	05.10.2020	Dr. Biman Mukherjee	Dr. T. Sentil Vadivel
9	Bachchu Paul	Computer Science & Engineering	PHD/TECH/CSE001/2020	05.10.2020	Dr. Santanu Phadikar	
10	Manasi Jana	Computer Science & Engineering	PHD/TECH/CSE002/2020	05.10.2020	Dr. Subhankar Joardar	Dr. Biswapati Jana
11	Writaparna Mukherjee	Computer Science & Engineering	PHD/TECH/CSE003/2020	05.10.2020	Dr. Bimal Kumar Datta	Dr. Pintu Pal
12	Debasree Mitra	Computer Science & Engineering	PHD/TECH/CSE004/2020	05.10.2020	Dr. Pranati Rakshit	
13	Moutan Mukhopadhyay	Computer Science & Engineering	PHD/TECH/CSE005/2020	05.10.2020	Dr. Aniruddha Dey	
14	Sowvik Dey	Computer Science & Engineering	PHD/TECH/CSE006/2020	05.10.2020	Dr. Amiya Karmakar	
15	Debjani Chakraborty	Computer Science & Engineering	PHD/TECH/CSE007/2020	05.10.2020	Dr. Biswajit Halder	
16	Biplab Kumar Mandal	Computer Science & Engineering	PhD/TECH/CSE008/2020	05.10.2020	Dr. Babul Prasad Tewari	
17	Reshma Roychoudhuri	Computer Science & Engineering	PHD/TECH/CSE009/2020	05.10.2020	Dr. Subhashis Majumder	Dr. Subhajit Datta
18	Debajyoti Guha	Computer Science & Engineering	PHD/TECH/CSE010/2020	05.10.2020	Dr. Radeep Chakraborty	
19	Pallavi Bharati	Electronic & Communication Engineering	PHD/TECH/ECE001/2020	05.10.2020	Dr. Madhumita Das Sarkar	
20	Gargi Jana	Electronic & Communication Engineering	PHD/TECH/ECE002/2020	05.10.2020	Dr. Manash Chanda	
21	Ananya Banerjee	Electronic & Communication Engineering	PHD/TECH/ECE003/2020	05.10.2020	Dr. Anilesh Dey	

22	Piyu Sarcar	Electronic & Communication Engineering	PHD/TECH/ECE004/2020	05.10. 2020	Dr. Anilesh Dey	
23	Mainak Mukherjee	Electronic & Communication Engineering	PHD/TECH/ECE005/2020	05.10. 2020	Dr. Manash Chandra	Dr. Angsuman Sarkar
24	Suman Sarkar	Electronic & Communication Engineering	PHD/TECH/ECE006/2020	09.10. 2020	Dr. Manash Chandra	
25	Suman Haldar	Electronic & Communication Engineering	PHD/TECH/ECE007/2020	05.10. 2020	Dr. Rajib Banerjee	Dr. Arindam Mondal
26	Nilanjan Byabarta	Electronic & Communication Engineering	PHD/TECH/ECE008/2020	05.10. 2020	Dr. Swarup Kumar Mitra	Dr. Abir Chattopadhyay
27	Aditi Sengupta	Electronic & Communication Engineering	PHD/TECH/ECE009/2020	05.10. 2020	Dr. Chandan Kr. Ghosh	Dr. Sanjib Bhattacharya
28	Anil Chamuah	Electronic & Communication Engineering	PHD/TECH/ECE010/2020	05.10. 2020	Dr. Chandan Kr. Ghosh	Dr. Sanjib Bhattacharya & Dr. Koyel Bhattacharya
29	Shantiram Nepal	Electronic & Communication Engineering	PHD/TECH/ECE011/2020	05.10. 2020	Dr. Madhumita Das Sarkar	Dr. Banani Adhikari (Das)
30	Amit Bhattacharyya	Electronic & Communication Engineering	PHD/TECH/ECE012/2020	05.10. 2020	Dr. Manash Chanda	
31	Anwesha Sengupta	Electrical Engineering	PHD/TECH/ELE001/2020	05.10. 2020	Dr. Gautam Kumar Panda	Dr. Sanjib Bhattacharya
32	Joy Bandopadhyay	Electrical Engineering	PHD/TECH/ELE002/2020	05.10. 2020	Dr. Provas Kumar Roy	
33	Sananda Biswas	Electrical Engineering	PHD/TECH/ELE003/2020	05.10. 2020	Dr. Sumit Banerjee	
34	Shubhasish Sarkar	Electrical Engineering	PHD/TECH/ELE004/2020	05.10. 2020	Dr. Santanu Das	Prof. Prithwiraj Purkait

35	Tuhin Shubra Das	Electrical Engineering	PHD/TECH/ELE005/2020	05.10.2020	Dr. Parthasarathi Bera	Dr. Papun Biswas
36	Susovan Dutta	Electrical Engineering	PHD/TECH/ELE006/2020	05.10.2020	Dr. J. K. Das	Dr. C K Chanda
37	Rikta Majumder	Electrical Engineering	PHD/TECH/ELE007/2020	05.10.2020	Prof. J K Das	Dr. Debasree Saha
38	Debosmita Chakraborty	Electrical Engineering	PHD/TECH/ELE008/2020	05.10.2020	Dr. Pradipta K. Banerjee	
39	Sujay Kumar Dolai	Electrical Engineering	PHD/TECH/ELE009/2020	05.10.2020	Dr. Prasanta Sarkar	Dr. Arindam Mondal
40	Subhasri Kar	Electrical Engineering	PHD/TECH/ELE010/2020	05.10.2020	Dr. Sumit Banerjee	Dr. Chandan Kumar Chanda
41	Anindya Ghosh	Electrical Engineering	PHD/TECH/ELE011/2020	05.10.2020	Dr. Rajan Sarkar	
42	Jyotirmoy Biswas	Electrical Engineering	PHD/TECH/ELE012/2020	05.10.2020	Dr. Prathasarathi Bera	Dr. Krishnendu Chakrabarty
43	Shukdeb Paul	Information Technology	PHD/TECH/ITC001/2020	05.10.2020	Dr. Anirban Mukherjee	Dr. Biswajit Roy
44	Anirbit Sengupta	Information Technology	PHD/TECH/ITC002/2020	05.10.2020	Dr. Abhijit Das	
45	Jayanta Datta	Information Technology	PHD/TECH/ITC003/2020	05.10.2020	Dr. Indrajit Pan	
46	Avik Chatterjee	Information Technology	PHD/TECH/ITC004/2020	05.10.2020	Dr. Abhijit Das	
47	Soumi Saha	Information Technology	PHD/TECH/ITC005/2020	05.10.2020	Dr. Indrajit Pan	
48	Debosmita Sikdar	Leather Technology	PHD/TECH/LTE001/2020	05.10.2020	Dr. Ivy Kanungo	
49	Sandeep Dey	Management Science	PHD/MNGT/MNS001/2020	05.10.2020	Dr. Indranil Mukherjee	Prof. Prasun Das
50	Dipanwita Biswas	Mechanical & Production Engineering	PHD/TECH/MPE001/2020	05.10.2020	Prof. Santanu Das	Dr. Prosenjit Das
51	Samarendra Acharya	Mechanical & Production Engineering	PHD/TECH/MPE002/2020	05.10.2020	Prof. Santanu Das	

52	Mintu Ghosh	Mechanical & Production Engineering	PHD/TECH/MPE003/2020	05.10. 2020	Dr. Sibsankar Dasmahapatra	
53	Arijit Shil	Pharmaceutical Technology	PHD/TECH/PTE001/2020	05.10. 2020	Dr. Paramita Dey	
54	Pubali Chakraborty	Pharmaceutical Technology	PHD/TECH/PTE002/2020	05.10. 2020	Dr. Subhabrota Majumder	Dr. Dilip Kumar Sahoo
55	Arka Bhattacharjee	Pharmaceutical Technology	PHD/TECH/PTE003/2020	05.10. 2020	Dr. N C Chaulya	Prof. Goutam Mukhopadhyay
56	Subhasis Chakraborty	Pharmaceutical Technology	PHD/TECH/PTE004/2020	05.10. 2020	Prof. Kalyan Kumar Sen	
57	Arpan Chakraborty	Pharmaceutical Technology	PHD/TECH/PTE005/2020	05.10. 2020	Dr. Manas Chakraborty	Prof. Goutam Mukhopadhyay
58	Sancharee Mondal	Pharmaceutical Technology	PHD/TECH/PTE001/2021	10.01. 2021	Dr. Kajal Ghosal	Dr. Subrata Chakraborty
59	Pubalina Samanta	Textile Technology	PHD/TECH/TTE001/2020	05.10. 2020	Prof. Adwaita Konar	Prof. Arijit Chakraborty
60	Sumanta Bhattacharya	Textile Technology	PHD/TECH/TTE002/2020	05.10. 2020	Prof. Arijit Chakraborty	
61	Sajal Barman	Textile Technology	PHD/TECH/TTE003/2020	05.10. 2020	Prof. Sudipta Sekhar Mahish	Dr. Prabir Kumar Mukherjee

ADF Students

Sl No	Name	Subject	Supervisor
1	Sruti Singha Roy	Biotechnology	Prof. Raja Banerjee
2	Suhasini Mallick	Biotechnology	Dr. Rina Rani Ray
3	Ahona Ghosh	Computer Science & Engineering	Dr. Sriparna Saha
4	Tanusri Ghosh	Computer Science & Engineering	Prof. Sriyankar Acharyya

Sanctioned Applicant List For 2020-21 Scholarship

Sl no	Name	Course	Scholarship	Status
1	SACHIN SARKAR	BSC	SVMCM	Fresh
2	ANUPAM MONDAL	BSC	SVMCM	Fresh
3	SAHELI SAMANTA	BSC	SVMCM	Fresh
4	SONALI SEAL	BBA	SVMCM	Fresh
5	SAUMALYO SINHAROY	BBA	SVMCM	Fresh
6	KANKAN GHOSH	BBA	SVMCM	Fresh
7	JAYITA KUNDU	BBA	SVMCM	Fresh
8	RIMA MAITY	BBA	SVMCM	Fresh
9	RAHUL GHOSH	BBA	SVMCM	Fresh
10	ARIT GHOSH	BBA	SVMCM	Fresh
11	SUMA KANJI	BCA	SVMCM	Fresh
12	AMRAPALI CHAKRABORTY	BCA	SVMCM	Fresh
13	SOURAV KARAK	BCA	SVMCM	Fresh
14	ANIK CHAKRABORTY	BCA	SVMCM	Fresh
15	SOHAM CHATTERJEE	BCA	SVMCM	Fresh
16	SUBHANKAR PAUL	BCA	SVMCM	Fresh
17	GARGI HALDER	MSC	SVMCM	Fresh
18	KABITA DEY	MSC	SVMCM	Fresh
19	JOYETA DEY	MSC	SVMCM	Fresh
20	MOUSUMI NATH	MSC	SVMCM	Fresh
21	MEGHA DEBNATH	MSC	SVMCM	Fresh
22	SANTANU PRAMANIK	MSC	SVMCM	Fresh
23	SOURAV KARMAKAR	MSC	SVMCM	Fresh
24	APARAJIRTA ADHIKARI	MSC Applied Chemistry	SVMCM	Fresh
25	DIPTAM BISWAS	MSC Applied Chemistry	SVMCM	Fresh
26	JOYDIP CHATTERJEE	MSC Applied Chemistry	SVMCM	Fresh
27	PIYALI SAMANTA	MSc Biotechnology	SVMCM	Fresh
28	SRAMANA MUKHERJEE	MSc Biotechnology	SVMCM	Fresh
29	SUTIRTHA BANERJEE	MSc Biotechnology	SVMCM	Fresh
30	MADHUMITA PRAMANIK	MSc Biotechnology	SVMCM	Fresh
31	ANKANA MANDAL	MSc Biotechnology	SVMCM	Fresh
32	SUBHADEEP DUTTA	MSc Biotechnology	SVMCM	Fresh
33	SUCHISMITA MUKHERJEE	MSc Biotechnology	SVMCM	Fresh
34	DEBARATI ROY	MSc Biotechnology	SVMCM	Fresh
35	RABINDRANATH PATRA	MSc Biotechnology	SVMCM	Fresh
36	PAYEL PAL	MSc Biotechnology	SVMCM	Fresh
37	RITAM BHOWMICK	MSc Biotechnology	SVMCM	Fresh
38	SWASTIKA GHOSH	MSc Biotechnology	SVMCM	Fresh
39	SUMITRA JANA	MSc Biotechnology	SVMCM	Fresh

40	SUKANYA GOSWAMI	MSc Biotechnology	SVMCM	Fresh
41	ANKITA GHOSE	MSc Biotechnology	SVMCM	Fresh
42	SOUMYADIP MONDAL	MSc Biotechnology	SVMCM	Fresh
43	BHIM HALDAR	MSc Biotechnology	SVMCM	Fresh
44	VICTRY SAMANTA	MSc (Food Science & Technology)	SVMCM	Fresh
45	SUMAN MANNA	MSc (Food Science & Technology)	SVMCM	Fresh
46	SUKRITI BERA	MSc (Food Science & Technology)	SVMCM	Fresh
47	RIYA GHOSH	MSc (Food Science & Technology)	SVMCM	Fresh
48	TUHIN DAS	MSc Forensic Science	SVMCM	Fresh
49	AVIJIT PAINE	MSc Forensic Science	SVMCM	Fresh
50	SUDIPTI BISWAS	MSc Forensic Sc	SVMCM	Fresh
51	RAJESH DEY	MSc Forensic Science	SVMCM	Fresh
52	PUROHIT BEJ	MSc IT Artificial Intelligence	SVMCM	Fresh
53	SUBHADIP SAHU	MSc IT Artificial Intelligence	SVMCM	Fresh
54	ARNAB MAITY	MSc IT (Data Science)	SVMCM	Fresh
55	NEELSEKHAR MANDAL	MSc IT (Data Science)	SVMCM	Fresh
56	DEBNARAYAN MANDAL	MSc IT (Data Science)	SVMCM	Fresh
57	AVIJIT JANA	MSc IT (Data Science)	SVMCM	Fresh
58	AYAN KHAN	MSc IT (Data Science)	SVMCM	Fresh
59	SUMITA DAS	MSc IT (Data Science)	SVMCM	Fresh
60	SRIMANTA PAL	MSc IT (Data Science)	SVMCM	Fresh
61	GAURAB SARKAR	MSc IT (Data Science)	SVMCM	Fresh
62	BIDISHA ADHIKARI	MSc IT (Data Science)	SVMCM	Fresh
63	ARPAN GHOSH	MSc IT (Data Science)	SVMCM	Fresh
64	AMAR SEN	MSc IT (Data Science)	SVMCM	Fresh
65	SUPARNA MONDAL	MSc IT (Data Science)	SVMCM	Fresh
66	MAYUKH BHAUMIK	MSc IT (Data Science)	SVMCM	Fresh
67	SUBHABRATA DEY	MSc (Applied Statistics & Analytics)	SVMCM	Fresh
68	SOUMITA KARMAKAR	MSc (Applied Statistics & Analytics)	SVMCM	Fresh
69	KORAK ROYGHATAK	MSc (Applied Statistics & Analytics)	SVMCM	Fresh
70	ANAMIKA SINGH	MSc (Microbiology)	SVMCM	Fresh
71	KOEL BISWAS	MSc (Microbiology)	SVMCM	Fresh
72	RIYA MAHAPATRA	MSc (Microbiology)	SVMCM	Fresh
73	POULAMI SEAL	MSc (Microbiology)	SVMCM	Fresh
74	SAPTATI PYNE	MSc (Microbiology)	SVMCM	Fresh

75	RAJPRIYO PAUL	MSc (Microbiology)	SVMCM	Fresh
76	PRADIP DAS	MSc (Microbiology)	SVMCM	Fresh
77	PAYEL MAITY	MSc (Microbiology)	SVMCM	Fresh
78	SWARNALI MANDAL	MSc (Microbiology)	SVMCM	Fresh
79	HIMANI RAY SINGHA	MSc (Microbiology)	SVMCM	Fresh
80	MANISHA MAITY	MSc (Microbiology)	SVMCM	Fresh
81	AMRITA GHOSH	MSc (Microbiology)	SVMCM	Fresh
82	PRITI MAITY	MSc (Microbiology)	SVMCM	Fresh
83	TANU KHAMRAI	MSc (Microbiology)	SVMCM	Fresh
84	SATABDI GORAI	MSc (Microbiology)	SVMCM	Fresh
85	ANNWESHA KARGUPTA	MSc (Microbiology)	SVMCM	Fresh
86	SOUVIK MAITI	MSc (Microbiology)	SVMCM	Fresh
87	CHAMELI NANDI	MSc (Microbiology)	SVMCM	Fresh
88	SOVAN MAJI	MSc (Microbiology)	SVMCM	Fresh
89	ABHISHEK SAHA	MSc (Microbiology)	SVMCM	Fresh
90	SWAGATA DAS	MSc (Molecular Biology)	SVMCM	Fresh
91	SOUMMADEEP SEN	MSc (Molecular Biology)	SVMCM	Fresh
92	GOUTAMI DAS	BSc IT (Artificial Inteligence)	SVMCM	Fresh
93	SOHAN DEY	BSc IT (Artificial Inteligence)	SVMCM	Fresh
94	RAHUL PANJA	BSc IT (Artificial Inteligence)	SVMCM	Fresh
95	ANIRBAN DEBNATH	BSc IT (Data Science)	SVMCM	Fresh
96	SAYAN MONDAL	BSc IT (Data Science)	SVMCM	Fresh
97	SUNIL MONDAL	BSc IT (Data Science)	SVMCM	Fresh
98	DIPAN GHARAMI	BSc IT (Data Science)	SVMCM	Fresh
99	JUNSUME DAS	BSc IT (Cyber Security)	SVMCM	Fresh
100	JIT SARKAR	BSc IT (Cyber Security)	SVMCM	Fresh
101	SNEHA MAJUMDER	BSc IT (Cyber Security)	SVMCM	Fresh
102	SOUMYAJIT MOJUMDER	BSc IT (Cyber Security)	SVMCM	Fresh
103	ROHIT MAJUMDER	BSc IT (Cyber Security)	SVMCM	Fresh
104	SUBHAJIT DUTTA	BSc IT (Cyber Security)	SVMCM	Fresh
105	PRITI GHOSH	BSc (Food Sc & Tech)	SVMCM	Fresh
106	JABA DEY	BSc (Food Science & Technology)	SVMCM	Fresh
107	SUVANKAR PURKAIT	BSc (Biotechnology)	SVMCM	Fresh
108	RITTIKA BAIRAGYA	BSc (Biotechnology)	SVMCM	Fresh
109	JAYSREE MAJUMDER	BSc (Forensic Science)	SVMCM	Fresh
110	SHREYASHI GHOSH	BSc (Forensic Science)	SVMCM	Fresh
111	SOURAJIT MAITY	BSc (Forensic Science)	SVMCM	Fresh
112	LIYAN DAS	BSc (Forensic Science)	SVMCM	Fresh
113	CHANDRIKA PAL	BSc (Forensic Science)	SVMCM	Fresh
114	INDRAJIT PAUL	BSc (Forensic Science)	SVMCM	Fresh
115	DIPANWITA ROY	BSc (Forensic Science)	SVMCM	Fresh

116	MAINAK PAUL	BSc (Materials Science)	SVMCM	Fresh
117	DHRUBA DAS	BSc (Materials Science)	SVMCM	Fresh
118	KULDEEP ROY	BBA (Hospital Management)	SVMCM	Fresh
119	ABIR DUTTA	BBA (Hospital Management)	SVMCM	Fresh
120	SEJUTI DAS	BBA (Hospital Management)	SVMCM	Fresh
121	SOHINI MAL	BBA (Hospital Management)	SVMCM	Fresh
122	BIKRAM CHATTERJEE	BBA (Travel & Tourism)	SVMCM	Fresh
123	SATYAJIT GHOSHAL	BTech	SVMCM	Fresh
124	ANUPAM MAJI	BTech	SVMCM	Fresh
125	SAGNIK JANA	BTech	SVMCM	Fresh
126	SOUMODIPTA MUKHERJEE	BTech	SVMCM	Fresh
127	RAJIB MANDAL	BTech	SVMCM	Fresh
128	SUMAN SIL	BTech	SVMCM	Fresh
129	DEBANJAN BAIDYA	BTech	SVMCM	Fresh
130	SHUBHAM KHAN	BTech	SVMCM	Fresh
131	RAHUL CHATTERJEE	BTech	SVMCM	Fresh
132	SUBHAJIT GHOSH	BTech	SVMCM	Fresh
133	RETAM PAUL	BTech	SVMCM	Fresh
134	SAYAN NANDI	BTech	SVMCM	Fresh
135	MONODIP BISWAS	BTech	SVMCM	Fresh
136	SHYMODIP KUNDU	MPharm	SVMCM	Fresh
137	MOUSUMI HALDER	MPharm	SVMCM	Fresh
138	SUMANA MAJI	MPharm	SVMCM	Fresh
139	JYOTIRMOY PANDA	MPharm	SVMCM	Fresh
140	SWETA DAS	MPharm	SVMCM	Fresh
141	SAYAN SANT	MPharm	SVMCM	Fresh
142	LOKESH CHANDRA MAHATA	MPharm	SVMCM	Fresh
143	SABYASACHI CHOUDHURI	MPharm	SVMCM	Fresh
144	ABHINANDAN BERA	MPharm	SVMCM	Fresh
145	MANABENDU SHAW	MPharm	SVMCM	Fresh
146	NABANITA PANJA	MPharm	SVMCM	Fresh
147	TAMAL BAIRAGI	MPharm	SVMCM	Fresh
148	KUNDAN SARDAR	MPharm	SVMCM	Fresh
149	SAYAN PRADHAN	MTech	SVMCM	Fresh
150	SHREYASHREE DAS	MTech	SVMCM	Fresh
151	SANKHADEEP CHAKRABARTI	MTech	SVMCM	Fresh
152	SUPRITI KAR	MTech	SVMCM	Fresh
153	SHALONY ROY	MTech	SVMCM	Fresh
154	TIYASHA DHARA	MTech	SVMCM	Fresh
155	BHAKTADAS DEY	MTech	SVMCM	Fresh
156	NANDITA SARKAR	MTech	SVMCM	Fresh
157	SUJIT KUMAR PANDIT	MTech	SVMCM	Fresh

158	AMIT GURIA	MTech	SVMCM	Fresh
159	KOUSHIK ROY	MTech	SVMCM	Fresh
160	SUJAN MONDAL	MTech	SVMCM	Fresh
161	PINKY PRAMANIK	MTech	SVMCM	Fresh
162	SUSMITA KUNDU	MTech	SVMCM	Fresh
163	UTTAM PATRA	MTech	SVMCM	Fresh
164	SOUMIK DAS	MTech	SVMCM	Fresh
165	TUSHAR KANTI DAS	MTech	SVMCM	Fresh
166	RIYA ROY	MTech	SVMCM	Fresh
167	MAHENDRA HALDER	MTech	SVMCM	Fresh
168	ARPAN ADHIKARY	MTech	SVMCM	Fresh
169	PUJA BAG	MTech	SVMCM	Fresh
170	SHANTANU HALDER	MTech	SVMCM	Fresh
171	ARGHYA DAS	MTech	SVMCM	Fresh
172	SAMIKSHAN DAS	MTech	SVMCM	Fresh
173	MEGHNAD HALDER	MTech	SVMCM	Fresh
174	ABHILASH MALLICK	MTech	SVMCM	Fresh
175	PALLAB DAS	MTech	SVMCM	Fresh
176	JOYDEEP SARKAR	MTech	SVMCM	Fresh
177	BAISHALI GHOSH	MTech	SVMCM	Fresh
178	RABINDRANATH GORAI	MTech	SVMCM	Fresh
179	SOUVIK MONDAL	MTech	SVMCM	Fresh
180	SANGITA SARKAR	MTech	SVMCM	Fresh
181	SUSOBHAN MASANTA	MTech	SVMCM	Fresh
182	SARMISTHA DAS	MTech	SVMCM	Fresh
183	TANMAY GHOSH	MTech	SVMCM	Fresh
184	KUNAL DUTTA	MTech	SVMCM	Fresh
185	SOURAV MALLICK	MTech	SVMCM	Fresh
186	JYOTI BISWAS	MTech	SVMCM	Fresh
187	HRIDAY DAS	MTech	SVMCM	Fresh
188	KAMAL RUIDAS	MTech	SVMCM	Fresh
189	DEBJYOTI BERA	MTech	SVMCM	Fresh
190	SUDIPTA KUNDU	MTech	SVMCM	Fresh
191	MRINAL KANTI BAG	MTech	SVMCM	Fresh
192	RABINDRANATH SAHU	MTech	SVMCM	Fresh
193	SIDDHARTHA GHOSH	MTech	SVMCM	Fresh
194	SOUBHIK MANDAL	MTech	SVMCM	Fresh
195	DEVDYUTI KARMAKAR	MTech	SVMCM	Fresh
196	SIDDHARTHA RAJAK	MTech	SVMCM	Fresh
197	RANJIT BASKEY	MTech	SVMCM	Fresh
198	ABHINANDAN GHOSH	MTech	SVMCM	Fresh
199	DIPANKAR ROY	MTech	SVMCM	Fresh

200	HARI PRASAD SARKAR	MTech	SVMCM	Fresh
201	SARNALI DAS	MBA	SVMCM	Fresh
202	ARCHISMAN MALLICK	MBA	SVMCM	Fresh
203	DEBJIT UKIL	MBA	SVMCM	Fresh
204	NILANJAN NAHA	MBA	SVMCM	Fresh
205	SOUMALYA LAHA	MBA	SVMCM	Fresh
206	DYUTI GANGOPADHYAY	MBA	SVMCM	Fresh
207	ABHOY KUMAR GHOSH	MBA	SVMCM	Fresh
208	MANASHI CHAKRABORTY	MBA	SVMCM	Fresh
209	DIPANKAR GHOSH	MBA	SVMCM	Fresh
210	TAPAS MONDAL	MBA	SVMCM	Fresh
211	PALLAB SARKAR	MBA	SVMCM	Fresh
212	ISHA PACHHAL	MBA	SVMCM	Fresh
213	UPASANA MONDAL	MCA	SVMCM	Fresh
214	ANIRBAN KUNDU	MCA	SVMCM	Fresh
215	BIBEK MUKHERJEE	MCA	SVMCM	Fresh
216	PARIJAT ADHIKARY	MCA	SVMCM	Fresh
217	ANUJ MALLICK	MCA	SVMCM	Fresh
218	SHILPA MONDAL	MCA	SVMCM	Fresh
219	RAKESH SADHUKHAN	MCA	SVMCM	Fresh
220	RAKTIM ROY	MCA	SVMCM	Fresh
221	ARUP MAJUMDER	MCA	SVMCM	Fresh
222	ABHISHEK GOPE	MCA	SVMCM	Fresh
223	JAYANTA PRAMANIK	MCA	SVMCM	Fresh
224	SUDIP BARIK	MCA	SVMCM	Fresh
225	SK ASIF KARIM	MSC (BIOTECHNOLOGY)	Post Matric	
226	MD MEHETAB ALI	BBA	Post Matric	
227	SYED TARIK AZIZ	MSC (BIOTECHNOLOGY)	Post Matric	
228	KARISHMA MANDAL	BBA	Post Matric	
229	SHADMAN KHURSHID	BBA	Post Matric	
230	SAHANUR MAJUMDER	M.Sc. in Applied Chemistry	Post Matric	
231	AYESHA KHATUN	B.Tech(IT)	Merit Cum-Means	
232	ASIF ALI	B.TECH (CSE)	Merit Cum-Means	
233	MD EBRAHIM	BTech	Merit Cum-Means	
234	ALI AHMED	B.Tech(IT)	Merit Cum-Means	
235	MD RASIMUL ISLAM	B.TECH (CSE)	Merit Cum-Means	
236	JINIYAS BISWAS	B.TECH (CSE)	Merit Cum-	

			Means	
237	MD SHAHID	B.Tech(IT)	Merit Cum-Means	
238	SAJID ALAM	B.TECH (CSE)	Merit Cum-Means	
239	ZAWED AKHTAR	B.Tech(IT)	Merit Cum-Means	
240	SAHADAT HOSSAIN	B.TECH (CSE)	Merit Cum-Means	
241	SK RAJJAK AHAMMED	B.TECH (CSE)	Merit Cum-Means	
242	SAHED ALI	B.TECH (CSE)	Merit Cum-Means	
243	SK PARVEZ AHAMED	M.Tech in CSE	Merit Cum-Means	
244	JAWED HOSSAIN	MBA(2 YEARS)	Merit Cum-Means	
245	SK MD SAKLINE MUSTAK	B.TECH (CSE)	Merit Cum-Means	
246	S M SOHEL BISWAS	B.Tech(IT)	Merit Cum-Means	
247	MOSTAFIJUR RAHAMAN	B.TECH (CSE)	Merit Cum-Means	
248	JABIR ALI	M.TECH	Merit Cum-Means	
249	MD ARSHAD	B.Tech(IT)	Merit Cum-Means	
250	RAKHSHUNDA NOOREIN JAWAID	M.Tech in Data Science	Merit Cum-Means	
251	JUEL SK	B.TECH (CSE)	Merit Cum-Means	
252	MD NAZIM ALAM	M.Tech in Renewable Energy	Merit Cum-Means	
253	SK SOHEL	BTech	Merit Cum-Means	
254	KAJI SUDRAY ALAM	M.Pharm in Pharmacology	Merit Cum-Means	
255	MD BASID ALAM	MBA (Hospital Administration)	Merit Cum-Means	
256	AQUEEF ALIM ANSARI	B.TECH (CSE)	Merit Cum-Means	
257	SK REHAN AHAMED	M.Tech in CSE	SVMCM	
258	NASIMA AKTAR	M.Tech in CSE	SVMCM	

259	MOHIMA KHATUN	B.Tech(IT)	SVMCM	
260	NAYEEM BADSHAH	M.Tech in Data Sc.	SVMCM	
261	SNEHA JOSHPIN DAS	M.Sc. in Media Science	SVMCM	
262	EMDADUL HOQUE	M.Tech in Software Engineering	SVMCM	
263	MUSTAFIJUR RAHMAN	M.TECH	SVMCM	
264	HASIBUL MONDAL	M.Tech in Data Science	SVMCM	
265	Mahfujur Rahman	M.Tech in GeoInformatics	SVMCM	
266	ASMANUR RAHAMAN	MBA(2 YEARS)	SVMCM	
267	MAINUL ISLAM	M.Tech in GeoInformatics	SVMCM	
268	KARISHMA KHATUN	BBA	SVMCM	
269	IRA KHATOON	MBA(2 YEARS)	SVMCM	
270	MURSELIM SHAIKH	MBA(2 YEARS)	SVMCM	
271	NAYEL MOMIN	M.Pharm in Pharmacology	SVMCM	
272	JANNAT AHAMED	BBA	SVMCM	
273	SAMIM MISTRY	B.Tech(IT)	SVMCM	
274	SOHEL MONDAL	B.Sc. in Food Science & Technology	SVMCM	
275	SOHEL RANA	M.Tech in Data Science	SVMCM	
276	NAHAL YASMIN	M.TECH	SVMCM	
277	RAHUL ANSARY	MCA(2 YEARS)	SVMCM	
278	RUKHSUN ARA PARVIN	M.Tech in CSE	SVMCM	
279	AMIR KHAN	M.Tech in Data Science	SVMCM	
280	SANTU KHAN	MCA(2 YEARS)	SVMCM	
281	RAMIJ RAJA	M.Tech in Artificial Intelligence	SVMCM	
282	GOLAM PARVEZ	M.Pharm in Pharmacology	SVMCM	
283	MAINAK REMAN	M.TECH	SVMCM	
284	MD AMIR SOHEL	MBA(2 YEARS)	SVMCM	
285	RICKY SARKAR	M.TECH	SVMCM	
286	SULTAN UL AREFIN	M.Tech in Information Security	SVMCM	
287	FIZA MOHIUDDIN	B.TECH (CSE)	SVMCM	
288	RUBINA AFFREEN	M.Sc. in Microbiology	SVMCM	
289	MD MUSTAFIJUR RAHAMAN MONDAL	B.Sc. in Food Science & Technology	SVMCM	
290	KAMALUDDIN MANDAL	M.Tech in Artificial Intelligence	SVMCM	
291	SUMAIYA KHATUN	BBA	SVMCM	
292	MD SAIF	M.Tech in CSE	SVMCM	
293	Farzana Khatoon	M.Tech in Microelectronics and VLSI Technology	SVMCM	

294	DIYASHA SEN	MSc	SVMCM	Renewal
295	SHRUTI HAZRA	MSc	Kanyashree K3	
296	SHUCHISMITA MALLICK	MSc	Kanyashree K3	
297	ANUSHREE PRATIHAR	MSc	Kanyashree K3	
298	YASHIKA SAUTYA	MSc	Kanyashree K3	
299	TANISHA NAZ	MSc	Kanyashree K3	
300	TINKU BHUNIA	MSc	Kanyashree K3	
301	MEGHAMALA PANDE	MSc	Kanyashree K3	
302	ARPITA PRADHAN	MSc	Kanyashree K3	
303	SUMANA SANTRA	MSc	Kanyashree K3	
304	GARGEE CHATTERJEE	MSc	Kanyashree K3	
305	SAMRIDDHI DAS	MSc	Kanyashree K3	
306	TANUSREE GHORAI	MSc	Kanyashree K3	
307	BAHAR KARMAKAR	MSc	Kanyashree K3	
308	NILANJANA MITRA	MSc	Kanyashree K3	
309	TRISHA METE	MSc	Kanyashree K3	
310	SUMANA MAITY	MSc	Kanyashree K3	
311	DEBLINA SAHA	MSc	Kanyashree K3	
312	SUTAPA SAMANTA	MSc	Kanyashree K3	
313	ARPITA CHOUDHURY	MSc	Kanyashree K3	
314	SILPI MANDAL	MSc	Kanyashree K3	
315	GARGI HALDER	MSc	Kanyashree K3	
316	PAYEL MAITY	MSc	Kanyashree K3	
317	MD RAFEH QURESHI	B.TECH (CSE)	AICTE – SAKSHAM SCHOLARSHIP SCHEME FOR SPECIALLY ABLED STUDENT(TECHNICAL DEGREE)	Fresh
318	TAMANNA SULTANA	B.TECH (IT)	AICTE – PRAGATI SCHOLARSHIP SCHEME FOR GIRL STUDENTS (TECHNICAL DEGREE)	Fresh

319	RIDAM BHOWMICK	BSC(BIO-TECHNOLOGY)	CENTRAL SECTOR SCHEME OF SCHOLARSHIPS FOR COLLEGE AND UNIVERSITY STUDENTS	Fresh
320	BANDITA DUTTA /BIPLAB DUTTA	M.TECH(BIO-TECHNOLOGY)	PG INDIRA GANDHI SCHOLARSHIP FOR SINGLE GIRL CHILD	Renewal
321	SUDIPTA DAS	M.TECH(BIO-TECHNOLOGY)	PG INDIRA GANDHI SCHOLARSHIP FOR SINGLE GIRL CHILD	Renewal
322	RITASREE DEB ROY	M.TECH(BIO-TECHNOLOGY)	PG INDIRA GANDHI SCHOLARSHIP FOR SINGLE GIRL CHILD	Renewal
323	SHUVAJIT MAITY	B.Tech(IT)	FINANCIAL ASSISTANCE FOR EDUCATION TO THE WARDS OF BEEDI/CINE/IOMC/LSDM-POST MATRIC	Renewal
324	KOUSIK GHOSH	M.Tech in INDUSTRIAL ENGINEERING AND MANAGEMENT	GATE	Fresh
325	DEEPAK SAH	M.Tech in MICRO ELECTRONICS & VLSI TECHNOLOGY	GATE	Fresh
326	TAMAL BHAUMICK	M.Tech in COMPUTER SCIENCE AND ENGINEERING	GATE	Fresh
327	ANIMESH DAS	M.Tech in INFORMATION TECHNOLOGY	GATE	Fresh
328	TRISHA BASAK	M.Tech in INFORMATION TECHNOLOGY	GATE	Fresh

329	UDAY SAHA	M.Tech in INDUSTRIAL ENGINEERING AND MANAGEMENT	GATE	Fresh
330	SUMAN BISWAS	M.Tech in COMPUTER SCIENCE AND ENGINEERING	GATE	Fresh
331	SOMNATH GHOSH	M.Tech in INFORMATION TECHNOLOGY	GATE	Fresh
332	SANCHITA MONDAL	M.Tech in COMPUTER SCIENCE AND ENGINEERING	GATE	Renewal
333	SUBHRADEEP MAITRA	M.Tech in INDUSTRIAL ENGINEERING AND MANAGEMENT	GATE	Renewal
334	ANIRBAN MITRA	M.Tech in INDUSTRIAL ENGINEERING AND MANAGEMENT	GATE	Renewal
335	GOPAL SAHA	M.Tech in INDUSTRIAL ENGINEERING AND MANAGEMENT	GATE	Renewal
336	SYED SAHIL	M.Tech in INDUSTRIAL ENGINEERING AND MANAGEMENT	GATE	Renewal
337	SOHINI KULAVI	M.Tech in BIOTECHNOLOGY	GATE	Renewal
338	ARPAN PAUL	M.Tech in INDUSTRIAL ENGINEERING AND MANAGEMENT	GATE	Renewal
339	ABHISHEK CHAURASIA	M.Tech in INDUSTRIAL ENGINEERING AND MANAGEMENT	GATE	Renewal
340	BHUPENDRA KUMAR SINGH	M.Tech in INFORMATION TECHNOLOGY	GATE	Renewal
341	TANUSHREE PAN	M.Tech in INDUSTRIAL ENGINEERING AND MANAGEMENT	GATE	Renewal
342	SOUMITA RAKSHIT	M.Tech in INDUSTRIAL ENGINEERING AND MANAGEMENT	GATE	Renewal
343	SMARAJIT NASKAR	M.Tech in COMPUTER SCIENCE AND ENGG.	GATE	Renewal

Report from the Office of the Inspector of Colleges

The matters pertaining to the Affiliation / Renewal Affiliation/ De-affiliation of the AICTE & Non-AICTE courses and Recognition / De-recognition of the different colleges are being looked after by the Inspection Department. In order to accomplish the abovementioned activities, the Inspection Department is carrying out the inspection round the year. In the year 2021, there are **198 colleges** as on 05.07.2021 affiliated to this University. The number of affiliated colleges since 2009-2010 is appended hereunder in tabular form:

Year	AICTE Approved Colleges	Non-AICTE Colleges	Total Colleges
2009-10	116	96	212
2010-11	119	84	203
2011-12	128	84	212
2012-13	120	85	205
2013-14	118	89	207
2014-15	115	85	200
2015-16	113	82	195
2016-17	115	82	197
2017-18	115	79	194
2018-19	114	80	194
2019-20	112	84	196
2020-21	110	88	198

The different modes of inspection of colleges are Physical Inspection/Paper Inspection through scrutiny of papers/scrutiny through Computerised web-based Management System (CWMS)/Inspection through digital mode.

Physical Inspection:
For the purpose of inspection of colleges the proforma pertaining to the Self Assessment Report & Inspection Report (SAR & IR) for AICTE approved colleges and Non-AICTE colleges conducting MAKAUT,WB courses has been designed by the Inspection Department. In that proforma, relevant norms of AICTE / MAKAUT,WB against each item has been embedded. Furthermore, the list of laboratories mentioning Code against each course semesterwise has been provided in that proforma of SAR & IR. The college concerned where the inspection will be carried out by the Inspection Team/Expert Visit Committee (EVC) fills up the Self Assessment portion of the proforma SAR & IR. At the very beginning of the inspection, the

concerned college Authority hands over the filled up SAR & IR duly signed by them to the Inspection Team/Expert Visit Committee (EVC) visiting the said college. The experts of the inspection team verify the Self Assessment made by the college against each item of the filled up SAR & IR and side by side record their observation against each item. The deficiencies as pointed out by the experts are communicated to the concerned college for the qualitative development. Renewal Affiliation Inspection, Surprise Inspection, Inspection for affiliation of Additional Course(s) and inspection for affiliation of new colleges are being carried out by this department.

Scrutiny of infrastructure through CWMS:

There are three (03) modules namely; (i) Faculty Information System (FIS), (ii) Infrastructure Information System (IIS) and (iii) Web based Management System (WMS) in the Computerized Web-based Management System (CWMS) which has been developed by Inspection Department. All infrastructure-related information of all affiliated colleges are kept in Infrastructure Information System (IIS). The information related to faculty particulars attached to all affiliated Colleges are kept in Faculty Information System (FIS). As all particulars related to the affiliated colleges are kept in the Web, this department is monitoring the colleges through Web-based Management System (WMS). Moreover, the implementation of this Computerized Web-based Management System (CWMS) is immensely helping the University particularly in terms of furnishing different types of data to the Regulatory Authorities like UGC, AICTE, MHRD etc. The Beta Version of the CWMS has also been introduced by the Inspection Department.

Digital Inspection:

At present **198 colleges** are affiliated to this University and those are located across the length & breadth of the State of West Bengal, the said College number is being increased year after year. Physical Inspection of all the colleges involving experts of different fields attached to different Institutions is not possible in an Academic Year as experts of different fields are not available for physical inspection of the colleges located in different Districts of West Bengal. The main reason of their non-availability is the travelling of long distance after completion of their respective normal assignment. Inspection of all colleges was under active consideration of the University for some time past. After careful consideration of all aspects pertaining to this matter, the University has decided to carry out the inspection through digital mode in addition to the physical inspection mode carried out at present.

Principle of Digital Inspection mode

There are two basic entities in the overall system which comprises: A) Broadcasting Studio at University end and B) College end where digital inspection will be carried out. Both the entities are connected through point-to-point video conferencing mode. At the simplest level, an online meeting (or a meeting over distance) takes place between these two entities, where (i) each participant can see an image of the other, and (ii) both parties are able to speak and

listen to the other participants in real time mode. For organizing such an event, software has been designed which is coping up with two basic tasks:

(i) Captures the voice stream from the microphone, encodes it, transmits to the other participant, and simultaneously decodes the digital voice stream being received from the remote participant in the video conference

(ii) Bridges both entities together across a digital connection, managing the exchange of voice and video between participants. At either end of the connection, the video and voice traffic are combined and delivered to each participant in the form of a real-time video image and audio stream.

There is a workstation at the University end and the same is connected by SONY high-definition camera, video & audio capture card, microphone, speaker and Panasonic audio mixture device. The laptop or client device at college end is connected with microphone, speaker, SONY HD cam and Logitech CR922 HD camera along with the power backup. The third party selected through the tender process carry the infrastructure for conducting video-conferencing at college-end according to the predefined schedule maintained by the Inspection Department and they are instructed by the expert team at University-end where they move to capture the video of college infrastructure and transmit to the University-end through the software configured by the University. The expert team at the University interacts with teachers, students and other official staff of the college in live mode and also sees the infrastructure of library, various types of labs and other infrastructures of the colleges in live mode. The live streaming information is temporarily stored into the cloud which will be retrieved later by the workstation at University after the end of point-to-point video-conferencing.

During the Covid - 19 pandemic situation inspection is being carried out through Zoom Cloud meeting App. The inspection of affiliated colleges are carried out time to time round the year by this department. In the year (2020-21) the inspection details are appended below:

1. No. of Existing Colleges (2020-21)	193 Colleges
2. No. of New Colleges (2020-21)	05 Colleges
3. No. of Existing Programmes (2020-21)	AICTE – 75, Non-AICTE : 62 B.Voc course - 19
4. No. of New Programmes (2020-21)	AICTE – 18
	Non-AICTE course – 04
5. No. of Colleges inspected (2020-21)	Physical inspection – 1 Colleges
	Digital mode of inspection – 54 Colleges

The University is vigilant to monitor the affiliated colleges in order to ensure qualitative development through the above-mentioned exercises.

A University with a difference

Uniqueness

- The University produces the largest chunk of technical manpower in the state who serves our industry.
- Introduced several Post-Graduate and Doctoral programmes at the University as well as in the affiliated colleges.
- Quick publication of examination results.
- The University covers the entire spatial span of the state for inclusive development of technical resources spread over all districts.
- Inclusion of the University in Section 2F and also in Section 12B of the UGC and recipient of UGC grant.
- Receives financial support from the Government of West Bengal and Government of India scholarship grant for M. Tech students with valid GATE score, DBT fellowship for M.Tech Biotechnology students.
- The University has been NAAC accredited with B++ grade.
- The University has a "Technology and Business Incubation Centre" - (Incubator status approved by Dept. of Science & Technology, India), named "EKTA" for start-up business.
- The University actively encourages its employees to upgrade their skills/ competence by providing opportunity to enrol in higher studies.
- After taking steady strides towards digitalizing classroom teaching, the Maulana Abul Kalam Azad University of Technology, West Bengal (MAKAUT, WB) is introducing in lieu of tech driven measures such as digital inspection, centralized e-compassing along with offering plethora of e-courses that can be availed by both students as well as teachers.
- MAKAUT, WB is all set to reshape and transform affiliation system by initiating the Digital Inspection of colleges from the 2018-19 academic session. This sui-generis approach of inspection will not only establish transparency in affiliation system but also reduce cost of physical inspection and time spent considerably.
- Being the largest university MAKAUT, WB affiliates nearly two hundred colleges offering courses in Engineering, Technology, Management and other professional disciplines. More than 1,40,000 students appear in the examinations every semester and the university churn out around thirty thousand graduates in different technological and management fields every year.
- Video recordings and presentations from the colleges giving details of their infrastructure as well as human resources are sought by the university. A digital studio has also been formed where the digital inspections monitor and authenticate. The expert members of the Inspection teams interact on regular basis with the faculty members, students and authorities of the colleges from the studio itself and obtain a real time assessment of the resources at the disposal of the Colleges seeking affiliation from the University without physically inspecting the premises.

- Further, students passing out from MAKAUT, WB will have the facilities to explore University's own placement portal where students can access list of interested companies and find out about vacancies. In order to aid students to seek credible job offers MAKAUT,WB has decided to launch this centralized placement portal that will provide a unique platform where students can find job opportunities. At the same time prospective employers also can reach out to the students through this portal.

- The university has also re-structured the existing assessment method with continuous evaluation process for the students based on the model curriculum of All India Council for Technical Education (AICTE). Students will need to earn 160 credits to earn the B.Tech degree and 20 additional credits to secure B.Tech (Hons.) degree, these additional 20 credits are to be earned using digital online platform. The University has already drawn up a basket of courses from different online platforms from which the students may judiciously choose courses to complete the B.Tech (Hons.) degree. For the Non-AICTE courses being offered by the university, the university has specified 120 credits for getting the degree and an additional 16 credits for earning the degree with Hons.

- Students interested in start-up and other entrepreneurial ventures as well as willing to undertake short term training programmes may be allowed to do so and the attendance and other class requirements of these students taken care of through the online courses offered on different platforms.

- The university envisages, this will create a learner-centric environment, improve student attendance, and significantly reduce the time spent in the current system of evaluation. The university has already set in motion the process of preparing the Question and Assignment Banks which will be crucial for implementation of the Continuous Evaluation Process.

- However, not just students but faculties too can avail these courses that will advance their performance score. This will also effectively eliminate the need for faculty members to undergo orientation/refresher courses which frequently disrupt the academic activities and whose efficacy has often been a matter of debate. In the Career Advancement Scheme (CAS) for faculty members, the teachers may be asked to complete a certain number of online courses to be identified by the appropriate Competent Authority of the University. These will carry certain weight in the score of the Academic Performance Indicator (API) and will be duly considered for promotion of the faculty members. Similarly, in the case of carrying out Ph.D coursework for researchers, the applicants may be asked to complete some online courses relevant to their area of research.

- Moreover, the university has emphasized the need to identify the research areas that have industry relevance and cumulatively have societal impact.

- These areas include disaster and environmental management, agriculture, biomedical applications etc. In fact, in every field of research activity, the tools of information technology will be extensively put to use and collaboration among researchers will be greatly encouraged.

Setting up of Satellite Campuses

The University has plans to set up satellite campus in the Bankura and Darjeeling in near future. The authorities of Bankura Unnayani Institute of Engineering Trust have agreed to donate 10.5 acres of land at their Hostel Campus. Further, the University has been granted seven acres of land in the Darjeeling area and the district authorities asked to identify this piece of land. The principal is to impart human resource development benefits and initiate socio-techno-economic stimulation of rural Bengal, Jungle Mahal region and hilly areas of West Bengal.

EKTA Incubation Centre-TBI (MAKAUT,WB)

EKTA incubation centre, established in 2006 as a Registered Society, is a Technology Business Incubator (TBI), founded and hosted by Maulana Abul Kalam Azad University of Technology, West Bengal (formerly WBUT) and supported by NSTEDB and DST, Government of India.
Registered Office: MAKAUT Kolkata campus at BF 142, Saltlake City Kolkata-700064.

Vision
- EKTA Incubation Centre was formed by MAKAUT to encourage and provide support to faculty members and students of the University along with budding entrepreneurs having unique ideas, innovative in nature to establish desired start-up ecosystem.
- Bridging the gap between Academia and Industry through a sustained R&D effort
- Facilitating the research scholars pursuing IPR by providing relevant information
- Taking part in the awareness generation and entrepreneurship development in the country

Facilities Provided/Proposed
Available Space for Incubation work space of 25Nos. each up to 200 sft. approx. for Incubatee, Conference Room , Biotech Lab Central Lab , Broadband with all amenities
1) Centrally Air Conditioned facility
2) Biotech Laboratory- Dry & Wet
3) Smart Conference room /Tinkering Lab
4) Library, Document Scanner, Photocopying Machine
5) 25 Incubatee Chambers of 150 – 200 sq ft Area with Work stations, chairs, etc.
6) Broad Band / Wifi facilities for all Incubatees

Current Activities& Projects:
1. Mentoring
2. Webinars on Entrepreneurship with successful entrepreneurs
3. EOI were floated for selection of start-up Incubatees. We received numerous applications amongst which the following were selected by the committee members through virtual meeting in August & Sept 2020.
   a) God's Own Team – They prepare various types of sanitizers
   b) Brammo – Manufacturing of Sanitary Napkins
   c) S.R. Enterprise-mainly trading of Water

d) Glorios Phyto Labs Pvt. Ltd.-LOI provided on Oct 2020
Virtual Inspection of their current space and documents were carried out in Sept 2020. LOI will be provided to the selected incubates once the terms & conditions for incubation is finalized with the legal cell of MAKAUT.

4. Online Talk show with Successful Entrepreneurs to encourage and motivate the student community of MAKAUT

Services Provided
❖ Physical Incubation
❖ Virtual/ satellite Incubation Services (JIS college, Camellia Institute)
❖ Mentoring Services
❖ Training Services
❖ Consultancy Services: IPR, Legal, Etc
❖ Fund Access Services

Achievements:
❖ ISBA Awards to Incubatee Companies (2011)
    1) Tunespray
    2) Comunet
❖ GoI MSME Grant-in-aid were awarded to 5 incubtees
❖ BIRAC Grant in 2020 – Glorios Phyto Labs Pvt. Ltd., a start-up company by alumnus students of MAKAUT, has been selected to receive this grant in 2020

The broad area of business interests and operations includes, Phytopharmaceutical product development, production of phytochemical reference materials, contract farming of medicinal products, ethical bio prospecting, bioinformatics, plant tissue culture and consulting services.

Presently, they are working on the project-Development of a novel low cost Automated Separation Technology based on Machine Vision Algorithms for the economical production of high purity Phytochemical Reference Standard.

Reach Us at:
Email: ektaincubationcentre@gmail.com
Facebook: https://www.facebook.com/ekta.tbi.3
Linkedin: https://www.linkedin.com/in/ekta-tbi-b23295184/
BLOG :   https://tbiventures.blogspot.com
Website: http://ektatbi.makautwb.net/

Persons involved with the TBI-EKTA
Dr. Atri Bhowmik   :   Vice Chairman & Finance Officer MAKAUT
Mr. Jay Prakash Shaw-   :   Director
Mr. Prodip Mukhopadhyay   :   Consultant
Smt. Anima Sur   :   Office Secretary

CSR Activities

Aim: Our Aim is committed to take up different community welfare and social development projects for the under privileged and unreached sections of society. MAKAUT, WB has taken an initiative to improve the quality of life of people, enrich the skill of the working population and address the various environmental aspects affecting the life of the population under CSR initiative throughout the academic year of 2019-20. Following initiatives were earnestly taken up by MAKAUT, WB.

1. Computer Literacy & Awareness for inmates of Presidency Correctional Home Since 20.1.20. MAKAUT, WB has taken up basic Computer Literacy & Awareness in consultation with the authorities for the academic development of the inmates of Presidency Correctional Home in the area of Computer Literacy so that they can pursue their academic goals/hobby during their stay and be prepared to obtain gainful employment after expiry of their sentence period. Thirty inmates have very successfully completed the course conducted with the help of WEBEL Ltd, a state Government undertaking. A Computer lab has also been set up in the Presidency Correctional Home.

2. MAKAUT, WB has contacted many leading organizationsof India namely Coal India, WB Power Development Corporation, Airports Authority of India to take up projects for social development as well as environmental issues with funds from these organizations. Proper presentation and high level discussions were held and most of the projects for social cause are under consideration, delayed due to the pandemic situation.

3. Garden Reach Ship Builders and Engineers (GRSE), Kolkata, had sanctioned Rs.5 lakhs for preparation of impact study of the CSR projects taken up by GRSE independently. The study has been successfully completed and report has been submitted to the organization.

4. Community Radio Centre:MAKAUT,WB proposed to set a Community Radio Centre in Haringhata Campus, WB, for social awareness and aid to students/agricultural community in the surrounding villages.The funding was arranged under "MP LAD fund of Hon'ble Shri Pradip Bhattacharyya", MP. An amount of Rs.38 lakhs has been receivedfor setting up of the Community Radio Centre. The project is under progress and will be fully operational after official clearance from respective authorities.

5. In order to enhance the skill of the working population MAKAUT,WB, approached M/S Ramakrishna Forgings Ltd and offered the following three courses:
   i.   Elaborate Management training in latest management subjects/fields/AI for their officer's cadre.
   ii. Training in latest welding technique for new welders selected from the local villages.
   iii. Training in 3D computer Printing techniques.

All the projects have been in principle approved but actual program could not be started because of Pandemic situation.

6. Initiative with HAL, Barrackpore: In order to enhance the skill of the working farmers in the village MAKAUT,WB, made a proposal to HAL, on 'Skill Development Training for farmers on Climate and Smart Sustainable Agriculture by promoting Natural Farming Practices'. Following were the objectives of the program:

   i)   Meeting with the Beneficiary Farmers.
   ii)   Training on formation of Joint Liability Group(JLG) for maintaining the SPV Water Pumping System already installed.
   iii)   Building capacities on formation & management of groups such as opening bank account, record keeping etc. including other related activities.
   iv)   Concept of Natural Farming Practices, Climate Smart Agriculture, and Preparation of Natural Manure with available local resources mainly cow dung, cow urine and other materials.
   v)   Training on Solid Waste Management with preparation of Organic Manure by converting Bio-degradable Waste.

Since it is field work, the work has been temporarily suspended due to pandemic situation. Efforts are in progress to engage in other CSR areas and discussions are being held with many organizations in and around Kolkata.

Facilities

Addition of 20 E-Classrooms with projector, smart boards, smart podium and sound system have been provisioned in the academic session 2020-21, wherein the students will be more benefitted by the Audio and Visual aid during the classrooms.

Implementation of ERP Enterprise Resource Planning (ERP) has been implemented in the University to manage day-to-day activities such as accounting, procurement, Fee Collection, registration, attendance, guest house and Hostel Management, Store Management, Vehicle Management, Salary management etc.

Events

Community Kitchen for the COVID19 hit localities of Haringhata and adjoining areas – MAKAUT, W.B like last year run community kitchen for the COVID19 hit localities from 20th May, 2021 to 23rd June, 2021 During this period MAKAUT, W.B had delivered 16,800

food packets (cooked food) to the. COVID19 affected peoples. The local administration of Haringhata, SDO Kalyani had given all administrative support to make the Community Kitchen of MAKAUT, W.B successful.

Reaching out the YAAS affected community at Hingalganj – MAKAUT, W.B reached out the YAAS affected community 600 families of Hingalganj on 10th June, 2021, wherein they have delivered raw food like rice, lentils, mustard oil, biscuits packets, packed drinking water, mask, sanitizers,

sanitary napkins, vegetables etc to the YAAS affected community.

MAKAUT, W.B was approached by one social group Devigram Foundation of Chakdah to provide the much required help to the people of Hingalganj who were very badly affected due to the nature's fury, Yaas.

Making the Administrative Building operational

The academic right, i.e., the Administrative Building was made operational in the month of May, 2021. The shifting of administration offices was done in the month of May, 2021. Earlier the administrative offices were operational at Biotech Building (Academic Left).

Plantation drive

MAKAUT, W.B has taken the initiative to plant more plants so as to compensate the loss due to Yaas. During June, 2021 mass plantation was carried out. Approx 4050 saplings were planted within the campus. Native plants like, wood apple, jasmine, Jack fruit, Mango Alstonia,, litchi, neem, etc were planted along the campus. MAKAUT, W.B has also liaised with WWF, Nature Kolkata and received 3000 saplings and the same were planted all along the campus. The plantation drive was a real success and had greatly contributed to make the campus green.

Life time Achievement award to Prof. Saikat Maitra, Hon'ble Vice Chancellor, MAKAUT - The Confederation of Indian Universities has presented the LIFETIME ACHIEVENT AWARD to Prof. (Dr.) Saikat Maitra, the Hon'ble Vice Chancellor of MaulanaAbul Kalam Azad University of Technology (MAKAUT), WB on the 05th September, 2021.

The International Benevolent Research Foundation (IBRF), Kolkata has also recognized Prof. Maitra as a FELLOW of the institute for his outstanding contribution in the areas of Science, Technology and Academic Administration. This was also awarded on the auspicious occasion of Teachers' Day on 5th of September, 2021.The Confederation of Indian Universities was established at the behest of Prof. K. Venkatasubramanian, the then Member of the Planning Commission in 2004. for uniting all the university level institutions in India with a view to optimizing their available resources and for mutual as well as technical cooperation among the universities for exchange of ideas and for mitigating the disastrous effects of the duplication of efforts and wastage in education.

MAKAUT Develops its New Operating System OSUM - An Operating System that can very well compete with WINDOWS of Microsoft! It is indigenously developed by the Information Technology (IT) Cell of Maulana Abul Kalam Azad University of Technology (MAKAUT), WB. Moreover, it is not at all expensive like Microsoft's Operating System, but can be procured totally free of cost. Operating System by the University of MAKAUT or OSUM has been developed under the guidance of Hon'ble Vice Chancellor Prof. (Dr.) Saikat Maitra by the IT Cell of the University. Operating Systems like OSUM can be used by all free of cost and this will benefit the society to a great extent.

Development of SMRITI Mask Scanner - The Technology Cell of MAKAUT, W.B had developed

Schematic Representation of "Smriti" AI based brain which has been used in Mask Scanner
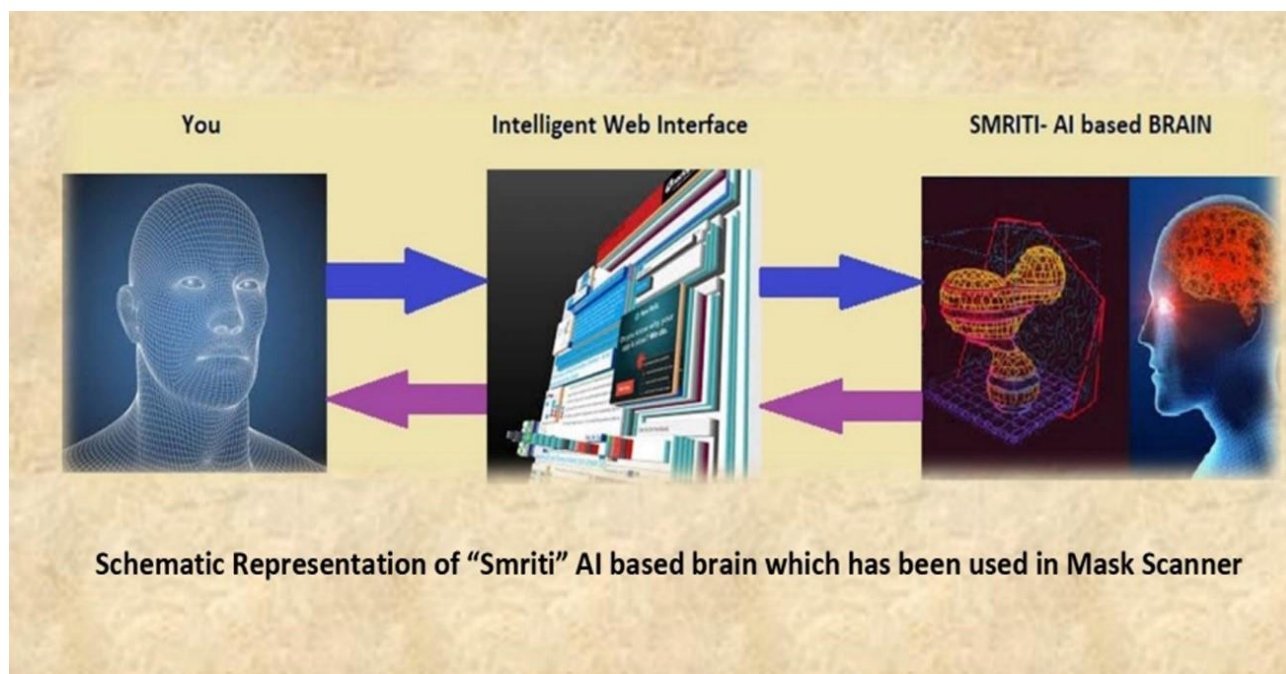
software named 'SMRITI Mask Scanner' which can detect the faulty wearing of mask by individuals. The software is on high demand by the Govt. Offices, Educational Institutions and other private organization.

Digital Library of MAKAUT, W.B - The Technology Cell of MAKAUT, W.B was instrumental in developing Digital Library of MAKAUT, W.B with approx. 2.3 Crores books in its repository. This will help the book lovers to access his/her book freely from any corner of the world.
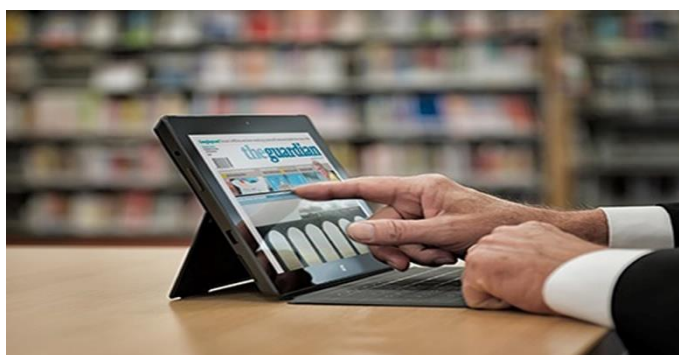
Development of vTV (Internet TV) of MAKAUT, W.B

The Technology Cell of MAKAUT, W.B had also developed vTV (internet TV) of MAKAUT, W.B which will be the storehouse for all the seminars, webinars, talks and different activities of MAKAUT, W.B. The application of vTV is also available in the app format in google play store. Any user can download and install the same for reference.

Soilless Farming of MAKAUT, W.B - The Technology Cell was instrumental in developing Soilless Farming at University premises of Salt Lake.

This farming is the future technology in the field of agriculture wherein only water is utilised for growing the plants and getting the yield without using any fertilizer.

Two Days Orientation Programme for Non-Teaching employees of MAKAUT, W.B - A two days orientation programme was conducted for the Non-teaching staff of MAKAUT, W.B from 19th March to 20th March, 2021. The aim was to enhance the skill of the non-teaching staff. Approx 176 employees attended the orientation programme. Noted speakers were invited to deliver lectures during the programme. Lectures on Service Writing, Wellness training etc. were

delivered during the orientation programme.

COVID19 Vaccination Drive for the employees of MAKAUT, W.B - On 27th April & 28th April, 2021, vaccination drive was conducted for the employees of MAKAUT, W.B at the Main Campus Haringhata. Approx. 412 employees got themselves vaccinated in the Campus. The vaccination drive was done with the help of SDO Kalyani and JNM Hospital.

COVID19 Vaccination Drive for the students of MAKAUT, W.B (on 28th September, 2021) - A vaccination drive was conducted for the students of MAKAUT, W.B at Main Campus Haringhata. A total of 144 students got vaccinated during the vaccination drive. The drive was undertaken with the help of DM, Nadia.

School Connect Program

Mulana Abul Kalam Azad University of Technology, West Bengal, has come forward to guide the students who are entering college soon, so that they are properly guided for their future career and thus have a golden future.

According to academicians and HR experts, the choice of subjects during admission to college plays a pivotal role. As the major subject plays a key role in the future job market and thus a student can accelerate his career.

The professional world is always an arena of tough competition. The students should have a proper selection of professional courses and get admitted to the best institutions for upward mobility in their career graph. Because it is proper training that enhances the skills and helps them to face the hard competition ahead in life. Thus best faculty enriches the knowledge base and helps to establish them professionally.

Keeping this in view, the Maulana Abul Kalam Azad University of Technology, W. B., has stepped up to guide the students at the end of their schooling. That's why it has created a branch known as School Connect Team that carries forward the School Connect Programme. It has been functioning since March 2019.

According to Professor (Dr). Saikat Maitra, the Vice-Chancellor of MAKAUT, WB., the objective of the School Connect Programme aims to increase the awareness about the Professional Courses of MAKAUT, WB., among the school students of WB and among their guardians, concerned authorities and other concerned stakeholders.

MAKAUT, WB., is trying to reach out to the youth community from their school days. This early initiative is to give them a winning edge once they complete their schooling. The main focus is, to guide and channelize the young talents so their career path can scud high. Thus for a rosy career MAKAUT, WB, is the ultimate goal. MAKAUT, WB, is trying in all possible ways to help the students who are our future so that their future career blossoms. MAKAUT, WB, through the School Connect Programme of this Technology University is aiming to give the best career counselling.

MAKAUT, WB, aims to provide the best domain knowledge to all students. The aim, according to Partha Pratima Lahiri, Registrar, MAKAUT, WB, is to bridge the gap of information that comes in the way of their choice of an appropriate professional future.

In order to spread this message among the school students, the School Connect Team of MAKAUT, WB was continuously organizing regular workshops, seminars and programmes in schools all over West Bengal before the pandemic. But since the pandemic days, the situation is different a bit as it has stopped organizing the programme in schools. In lieu of that, it has initiated putting the programme on virtual platform.

According to Partha Karmakar, the Deputy Secretary (Academic), West Bengal Board of Secondary Education, the versatile programme by MAKAUT ,WB, on the virtual platform, those related to Education, has meanwhile created a profound and a positive impression about MAKAUT, WB.

The carrier guidance by MAKAUT, WB, will help the concerned students to seek out their interests and follow their passions in pursuing their preferred career options. Thus MAKAUT WB, has been developing the educational society in City, town and rural areas too. Thus MAKAUT, WB is trying to be a game-changer for future generations.

Schools to connect for professional technical courses

School connect team of MAKAUT, WB is trying to build up a bridge to popularize professional technical courses among the students and guardians community during 2019-2021. The school connect team visited many schools of the list given below to interact with the students for distributing Fliers/ conducting awareness camp/ involving them in Setu Bandhan programme and taking other related activities to encourage the students to build their career in technical courses and become professional in the respective field of study they chose to follow.

District wise list of Schools

Nadia

- Fatepur High School
- Fatepur Girls' High School
- Anandapur High School
- Barajajuli Gopal Academy
- Birohi Netaji Vidyabhavan
- Laopala Kalpataru High School
- Haringhata Sarajubala Balika Vidyalaya
- Panpur Adarsha Vidyapith (H.S.)
- Baksha High School
- Haripukuria High School
- Nagarukhra High School
- Nagrukhra Khetramohan Girls High School
- Dighalgram Netaji Vidyapith

- Julien Day High School
- Kalyani Sikhyatan High School
- Saraswati State Trust High School
- Kalyani Central Model High School
- Rajberia High School
- Pannalal Institution
- Kalyani University Experimental High School
- Kalyani Springdale High School
- Bidhan Chandra Memorial Govt. Girls' High School
- Delhi World Public School
- Garden High School
- Kamalpur High School
- Kamalpur Girls' High School

- ❖ Kasthadanga Tarakdas Vidyapith
- ❖ Nimtala Rangeswar High School
- ❖ Nimtala Ramesh Chandra Girls High School
- ❖ Garali Netaji High School
- ❖ Familia High School
- ❖ Oriental Public School

- ❖ Basantakumari Girls High School
- ❖ Tatla Chandra Kishor Vidyapth
- ❖ Co-Aparetive High School
- ❖ Satis Chandra Memorial High School
- ❖ Ramlal Academy
- ❖ Hindu High School

- ❖ Sutragarh Girls' High School
- ❖ Santipur Public School
- ❖ Municipal High School (Santipur)
- ❖ Fulia Girls High School
- ❖ Fulia Sikshaniketan High School
- ❖ Mrinalini Girls' High School
- ❖ Holy Family Girls' High School
- ❖ Nabadwip Bakultala High School (Boys)
- ❖ Nabadwip Tarasundari Girls' High School
- ❖ Nabadwip Hindu High School
- ❖ Nabadwip Bakultala Balika Vidyapith
- ❖ Nabadwip Balika Vidyapith
- ❖ Nabadwip Siksha Mandir

- ❖ Habra Model High School
- ❖ St. Stephen High School
- ❖ Habra High School
- ❖ Habra Girls' High School
- ❖ Nahata High School
- ❖ Nahata Girls' High School
- ❖ Chowberia High School
- ❖ Chowberia Girls' High School
- ❖ Indian Girls' High School

South 24 Parganah
- ❖ Budge Budge P.K. High School
- ❖ St. Pauls High School, Budge Budge
- ❖ Krishna Chandrapur High school, Mathurapur

North 24 Parganah
- ❖ Kalyangarh Vidyamandir
- ❖ Kanchrapara Kendriya Vidyalaya 1
- ❖ Kanchrapara Kendriya Vidyalaya 2
- ❖ Ramkrishna High School, Halishahar
- ❖ Kappa High School
- ❖ Hernet High School
- ❖ Dariapur High Madrasa
- ❖ Shikaripur High School

Hooghly
1. Spark School (Pandua)
2. Bilsara R. N. High School

Purba Bardhaman
- ❖ Samudragarh High School
- ❖ Jaluidanga G. C. P Balika Vidyalay
- ❖ Kalna MSDM High School
- ❖ Kalna Maharaja's High School
- ❖ Kalna Ambika M. High School

❖ Shikaripur Girls' High School ❖ Sutia Moulana Abul Kalam Azad High School ❖ Kaminy Kumary Girls High School	❖ Kalna Sashibala Saha Girls' High School

❖ Kalna Hindu Girls' High School ❖ Paruldanga Nasratpur High School **Kolkata** ❖ Jodhpur Park Girls' High School ❖ Jadavpur Vidyapith ❖ Hare school ❖ Modernland Girls' High School ❖ Santoshpur Vidyapith ❖ Santoshpur Rishi Aurobindo Balika Vidyapith ❖ Jadavpur Rishi Aurobindo Vidyapith ❖ Adarsha Balika Sikshyatan ❖ The BSS school ❖ South Point High School ❖ Gokhale Memorial Girls' School ❖ Calcutta Girls' High School ❖ Bethune Collegiate school ❖ Sanskrit Collegiate school ❖ Rammohan Mission High School ❖ Behal Arya Vidyamandir ❖ Vivekananda palli Kishore Bharati ❖ Gurukul Vidyapith ❖ Vivekananda Mission Joka ❖ M. P. Birla Foundation H.S School ❖ Shaw Public School	❖ Barisha High School ❖ St. Merry's High School **Howrah** ❖ Jogesh Chandra Girls' High school ❖ Burikhali K. M. Institution ❖ Basudebpur K.N.P.C. High School ❖ Uluberia Nona High School **Purba Medinipur** ❖ Kolaghat Thermal Power Plant High School ❖ Gopalganj Priyanath Banibhaban (H.S.) **Kalimpong** ❖ Girls' Higher Secondary school ❖ St. Augustines school ❖ Dr. Grahams Homes ❖ The Scottish Universities' Mission Institute ❖ Saptashree Gyanpeeth ❖ Rockvale Academy ❖ Kumudini Homes ❖ St. Philominas School ❖ St. Joseph's Convent ❖ Kamal Jyoti School ❖ Vrindavan School ❖ Paramount School

❖ Behala Shyama Sundari Vidyapith		**Darjeeling**
❖ Meghmala Roy Education Centre		❖ Himali Boarding School
❖ Behala sikshyatan		❖ St Anthony's School and
❖ Behala Girls' High School		❖ St. Augustine School
❖ Behala High School		
❖ Bidya Bhaban		

School Connect Team Visited Schools to Connect with Students during 2021

Sl No	Name of the School	Date	MAKAUT Officials
	Hooghly		
1	Serampore High School	10.02.21	Supriya Tarafder Rupak Roy
2	Chatra Nandalal (For Boys)	10.02.21	Supriya Tarafder Rupak Roy
3	Chatra Nandalal (For Girls)	10.02.21	Supriya Tarafder Rupak Roy
4	Rames Chandra Girls' High School	10.02.21	Supriya Tarafder Rupak Roy
5	Serampore Mission Girls High School	10.02.21	Supriya Tarafder Rupak Roy
6	Serampore Malina Lahiri Boys Academy	10.02.21	Supriya Tarafder Rupak Roy
7	Ballavpur High School	10.02.21	Supriya Tarafder Rupak Roy
	North 24 Pargana		
1	Gurdaha Rishi Aurovinda Vidyaniketan (Shyamnagar)	11.02.21	Supriya Tarafder Rupak Roy
2	Rishi Aurovinda Vidyaniketan for Girls'	11.02.21	Supriya Tarafder Rupak Roy

3	Mulajore Sitanath Pathsala	11.02.21	Supriya Tarafder Rupak Roy
4	Noapara Brambhamoyee Vidyalya	11.02.21	Supriya Tarafder Rupak Roy
5	Familia School	10.02.21	Debobrata Das, Ashis Poddar
6	Kanchrapara Indian Girls' High School	10.02.21	Debobrata Das, Ashis Poddar
7	Kanchrapara Harnett High School	10.02.21	Debobrata Das, Ashis Poddar
8	Kanchrapara Municipal Politechnic High School	10.02.21	Debobrata Das, Ashis Poddar
9	Kanchrapara Municipal Politechnic Balika Vidyalya	10.02.21	Debobrata Das, Ashis Poddar
10	Kanchrapara Janata High School	10.02.21	Debobrata Das, Ashis Poddar
11	Boikunthpur Satish Smriti Vidyamandir	11.02.21	Debobrata Das, Ashis Poddar
12	Sritama Basu coaching Centre	18.02.2021	Rupak Roy
13	Avisekh Haldar Coaching Centre	18.02.2021	Rupak Roy
14	Dipankar Dey Coaching Centre		Rupak Roy
15	Laltu Sir Coaching Centre		Rupak Roy
16	Sundia High School Boys	23.02.2021	Rupak Roy, Debobrata Das
17	Sundia High School Girls	23.02.2022	Rupak Roy, Debobrata Das
18	Kakinara Humayutulla Gurbah High School	23.02.2023	Rupak Roy, Debobrata Das
19	Bhatpara Amar Krishna Pathsala	23.02.2024	Rupak Roy, Debobrata Das
20	Bhatpara Taraknath Girls' High School	23.02.2021	Rupak Roy, Debobrata Das
21	J.N.S. Vidyamandir (Class - X)	23.02.2026	Rupak Roy, Debobrata Das

22	Sandipda Coaching Centre	24.02.2021	Rupak Roy,
23	Shipli Chowdhury Coaching	24.02.2021	Rupak Roy,
24	Nabin Pal Coaching Centre	24.02.2021	Rupak Roy,
25	Arijit Sir Coaching Centre	24.02.2021	Rupak Roy,
26	Bhatpara High School Boys	24.02.2021	Rupak Roy, Debobrata Das
27	Naihati Mahendra High School	24.02.2021	Rupak Roy, Debobrata Das
28	Naihati Narendra Vidyamandir	24.02.2021	Rupak Roy, Debobrata Das
29	St. Luke's Days High School	24.02.2021	Rupak Roy, Debobrata Das
30	Garifa High School Naihati, Garifa (Boys)	24.02.2021	Rupak Roy, Debobrata Das
31	Bijoynagar Vidyalaya (Class - X)	24.02.21	Rupak Roy, Debobrata Das
32	Naihati Adarsha Vidyaniketan (Boys)	24.02.21	Rupak Roy, Debobrata Das
33	Naihati Adarsha Vidyaniketan (Girls) - Class - X	24.02.21	Rupak Roy, Debobrata Das
34	Avijit Sir Coaching Centre	24.02.21	Rupak Roy
35	Bheto Sir Coaching Centre	24.02.21	Rupak Roy
36	Ichapur Girls' High School	26.02.2021	Rupak Roy, Debobrata Das
37	Northland High School Boys	26.02.21	Rupak Roy, Debobrata Das
38	Ishapore KV - 1	26.02.2021	Rupak Roy, Debobrata Das
39	Sridhar Bangsidhar High School	26.02.2021	Rupak Roy, Debobrata Das
40	Nawabganj High School Ichapur	26.02.2021	Rupak Roy, Debobrata Das
41	Nawabgunz Balika Vidyalya	26.02.2021	Rupak Roy, Debobrata Das

42	Ichapur Anandanmath Balika Vidyapith	26.02.2021	Rupak Roy, Debobrata Das
43	K. V. No 2	05.03.2021	Rupak Roy
44	Shanti Nagar Balika Bidyalya, Palta	05.03.2021	Rupak Roy
45	Shantianagar High School, Palta	05.03.2021	Rupak Roy
46	Shiuli Hossainia High Madrasa Barrackpore	05.03.2021	Rupak Roy
47	Shiuli Balika Vidalaya, Barrackpore	05.03.2021	Rupak Roy
48	Sewli High School Boys, Barrackpore	05.03.2021	Rupak Roy
49	Central Paublic School	05.03.2021	Rupak Roy
50	Nilgunge Sikshayatan Barasat	05.03.2021	Rupak Roy
	Nadia		
1	Barajaguli Gopal Academy	09.02.21	Ashis Poddar
2	Haringhata Sarjubala Balika Vidyalya	11.02.21	Debobrata Das Ashis Poddar
3	Haripukuria High School	11.02.21	Debobrata Das Ashis Poddar
4	Fatepur High School	11.02.21	Debobrata Das Ashis Poddar
5	Fatepur Girls High School	11.02.21	Debobrata Das Ashis Poddar
6	Anandapur High School	11.02.21	Debobrata Das Ashis Poddar
7	Kalyani Sikshyatana	18.02.2021	Debobrata Das Ashis Poddar
8	Kalyani University Experimental High School	18.02.2021	Debobrata Das Ashis Poddar
9	Springdale High School	18.02.2021	Debobrata Das Ashis Poddar
10	Pannalal institution	18.02.2021	Debobrata Das Ashis Poddar
11	Ghoshpara Saraswati Trust Estate Vidyapith (H.S)	24.02.2021	Ashis Poddar

12	Majherchar Satyapriya Roy Smriti Vidyapith (H.S.)	24.02.2021	Ashis Poddar
13	Jawahar Navoday Vidyalya	24.02.2021	Ashis Poddar
14	Oriental Public School	05.03.21	Debobrata Das Ashis Poddar
15	Madanpur K.A. Vidyalaya (Boys)	10.03.21	Debobrata Das Ashis Poddar
16	Madanpur K.A. Vidyalaya (Girls)	10.03.21	Debobrata Das Ashis Poddar
17	Aliapur Monorama Sikshaniketan (Co-ed)	Physically	10.03.21
21	Bhowanipur Sukanta Vidyaniketan (H.S), Chakdaha	Physically	17.03.2021
22	Chakdah Purbachal Vidyapith (H.S.),	Physically	17.03.2021
23	Chakdaha Ramlal Academy	Physically	17.03.2021
24	Chakdaha Purbachal Balika Vidyapith	Physically	17.03.2021
25	Chakdaha Bapuji Balika Vidyamandir.	Physically	17.03.2021
26	Birohi Netaji Vidyapith	Physically	20.03.2021
27	Baikunthapur Satish Smriti Vidyapith	Online	24.03.2021
28	Panpur Adarsha Vidyapith	Online	20.03.2021
29	BidhanChandra Memorial Girls' High School		16.10.2020
	Kolkata		
1	Sanskrit Collegiate School	Physically	09.02.21
2	Scottish Church Collegiate School	Online	09.02.21
3	Jadavpur Vidyapith	Online	15.01.2021
4	Bethune Collegiate School	Online	25.01.2021
5	South Point High School		11.10.2020
	South 24 Pargana		
1	BudgeBudge Uchcha Balika Vidaylaya		08.03.21

Career Counseling Program for Students 2020-21. (Online and Off line)

Name	District	Date and Time	
Rajlakshmi Kanya Vidyapith	Nadia	10.09.2020 at 7 PM	September,20
Rajlakshmi Kanya Vidyapith	Nadia	11.09.2020 at 7 PM	
Borojaguli Gopal Academy	Nadia	22.09.2020 at 7 PM	
Chakdaha Kamalpur Adarsha Vidyapith	Nadia	14.09.2020 at 7 PM	
Fulia Sikshaniketan	Nadia	16.09.2020 at 7 PM	
BidahnChandra Memorial Govt. Girls High School	Nadia	27.09.2020 at 7 PM	
Howrah Jogesh Chandra Girls School	Howrah	11.10.2020 at 1 PM	October, 20
Gokhale Memorial Girls' High School	Kolkata		
South Point School	Kolkata	11.10.2020 at 7 PM	
Rammohan Mission	Kolkata		
Sanskrit Collegiate school	Kolkata		
Mira High School	Nadia	08.10.2020 at 7 PM	
Borojaguli Gopal Academy	Nadia	09.10.2020 at 7 PM	
Bethuadahari J. C. M High School	Nadia	12.10.2020 at 7 PM	
Bankura Municipal High School	Bankura	10.10.2020 at 7 PM	
Nabadwip Balika Vidyalaya.	Nadia	13.10.2020 at 7 PM	
Kalna Maharaja High School	Purba Bardhaman	14.10.2020 at 7 PM	
Central Modern School Baranagar	North 24 Pargana	24.11.2020	December, 20
Syamnagar Girls' High School	North 24 Pargana	09.12.2020	
Atpur Balika Vidyalya	North 24 Pargana	18.12.2020	
Gayeshpur Kishaly High School	Nadia	27.01.2021	January, 21
Bethune Collegiate School	Nadia	28.01.2021	
NawadipHindu High School	Kolkata	29.01.2021	
Noapara Bramhamoyee	North 24	02.03.2021 at 7 P.M.	

School	District	Date	Month
Vidyalaya	Pargana		
Sundia Girls' High School	North 24 Pargana	04.03.2021 at 7 P.M	
Nawabganj High School	North 24 Pargana	05.03.2021 at 5 P.M	
Majherchar SatyaPriya Roy Smriti Vidyapith	Nadia	05.03.2021 at 7 P.M	
Naihati Adarsha Vidyamandir	North 24 Pargana	08.03.2021 at 7 P.M	
Ghoshpara Saraswati Trust Estate Vidyapith	Nadia	09.03.2021 at 7 P.M	
Kanchrapara Harnett High School	North 24 Pargana	10.03.2021 at 7 P.M	
Kanchrapara Municipal Polytechnic Balika Vidyalya	North 24 Pargana	12.03.2021 at 7 P.M	
Kanchrapara Polytechnic High School	North 24 Pargana	15.03.2021 at7 P.M	March, 21
Kakinara- Jagaddal Humayutullah Gharami High School	North 24 Pargana	17.03.2021 at 7 P.M	
Sundia High School (Boys)	North 24 Pargana	18.03.2021 at 7 P.M	
Baikunthapur Satish Smriti Vidyapith	North 24 Pargana	22.03.2021 at 12 Noon	
Rajlakshmi Kanya Vidyapith	North 24 Pargana	23.03.2021 at 12 Noon	
Birohi Netaji Vidyamandir	Nadia	24.03.2021 at 12 Noon	
Panpur Adarsha Vidyapith	Nadia	24.03.2021 at 7 P.M	
Bara Jaguli Gopal Academy	Nadia	25.03.2021 at 12 Noon	
Anandapur High School	North 24 Pargana	26.03.2021 at 12 Noon	

School	District	Date	Month
Madanpur K.A Vidyalaya.	Nadia	05.04.2021	
Madanpur K A Vidyalaya for Girls (H.S.)	Nadia	07.04.2021	
Alaipur Manorama Siksha Niketan	Nadia	08.04.2021	April, 2021
Bhowanipur Sukanta Vidyaniketan (H.S), Chakdaha	Nadia	12.04.2021	
Chakdah Purbachal Vidyapith (	Nadia	13.042021	

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H.S.),			
Chakdaha Ramlal Academy	Nadia	16.04.2021	
Chakdaha Purbachal Balika Vidyapith	Nadia	19.04.2021	
Chakdaha Bapuji Balika Vidyamandir.	Nadia	20.04.2021	
Shiuli Hasinia High Madrasa	North 24 pargana	21.05.2021	

Co-curricular activities of the students

MAKAUT, WB always wants to develop the co-curricular activities of the students. To fulfil the purpose, MAKAUT, WB has arranged a competition throughout the state among the students from classes 1 to 12. University has announced some co-curricular activities. Any school student from classes 1 to 12 may participate and they have to upload their activities in online platforms and send the evidence to a mail ID. After the Lockdown period is over University will give them a Certificate. In this way University wants to encourage the talent of the students which may be hidden due to pressure of studies or any other reason.

State Level QUIZ Contest for Students

'Quiz' is a very attractive programme to most of the students. It also helps to enrich knowledge on multifarious issues. Amid lockdown due to Covid pandemic, School Connect Team of MAKAUT W. B. arranged for an on - line Quiz Contest among the Schools in West Bengal. The team contacted enormous schools and invited to send their students to the contest. It was a short time preparation. However, 300 students from 60 schools participated in it. The live programme was too much enjoyable and students those watched live or recorded programme on university or social site, learnt a lot. Every students was given certificate. So, MAKAUT has taken various cultural and jovial paths related to knowledge enrichment directly or indirectly for bringing the vice - versa proximity. It has been increasing the number of schools, in its contact list all but everyday. However, Makaut had arranged for a Quiz Contest among the school and encouraged the students on the field. Starting on October 31st 2020, it continued upto November 20, 2020. Three hundred students from 60 schools took part in the quiz contest.

Debate Competition

MAKAUT, WB. had arrange for debate for school students from class VI to XII . The students appeared in it through virtual platform.

There were two groups of debate and the groups were named after Einstein and Galellio. The subject of debate for Einstine group was -- 'Imagination is more powerful than imitation'. Seven students appeared in it from various schools. It happened on May 11, 2021.The judges were selected from various schools. The subject of debate for Galellio group was -- ' Science education can not develop morality'. Ten students from different schools took part in the programme through virtual platform. Here too, the students from six to twelve classes were allowed. It also was performed on May 11, 2021.

Speech Competition

Speech Competition was arranged by MAKAUT in two groups consisting students from class VI to XII. It took place on May 10, 2021. The students from various schools in West Bengal took part in it. The groups were named after Rabindranath Tagore and Swami Vivekananda. While there were 10 contestants in Tagore group, 16 were in rest Vivekananda group. While Tagore group was meant for class VI to VIII, Vivekananda group was for IX to XII. Whole the programme was performed through on - line. The subject for speech for both group was -- Drug abuse and addiction in youth generation hindering their mental growth and development.

State Level Essay Competition

An on - line Essay contest was called by MAKAUT in December 2020.125 students from 30 schools in West

Bengal took part in it. There were three groups on basis of class and topics were different for each group. First group was for class V to VIII. Next group was for classes IX and X and rest one group was for XI and XII. There were different subject for each group. As instance, the second group was given the issue of 'Water wealth of the globe.

Mathematics without fear and mathematics in nature

Generally there is a fear on Mathematics in a lion part of school - student community. MAKAUT, under the leadership of its Vice Chancellor Professor Saikat Maitra, came forward with effort to remove the unseen fear on Mathematics.

So, it arranged for a programme on the issue of 'Mathematics in Nature' on webinar, which helped the students to get fun and the fear on mathematics were, to some extent, removed. About 300 school students in addition to huge number of school Teachers and guardians enjoyed it, sitting in their own drawing room. The same is available in University site too. However, they demanded to place more such programme. MAKAUT Vice Chancellor Professor Saikat Maitra, Professor Pritimoy Sanyal, Professor Indranil Mukhopadhyay, Professor Sukhendu Samajdar, Professor P. N. Dutta and WBBSE, Deputy Secretary (Academic) Partha Karmakar appeared the programme actively. It was delineated in the programme how the Mathematics are latent in Nature. An expert explained why a Jiraff eats Pine leaves only of tenth tree after eating a tree at each time. Why a butterfly flatters (flaps) its wins under Sun etc. Another expert described that there is Geometry in movement of flock of flying birds and fishes. Such many interesting things were discussed.

School Connect Magazine

School connect team has taken the initiative to boost up students by the magazine. They can participate in the university's magazine directly. School connect team launched the

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magazine only for school students during April, 2021.
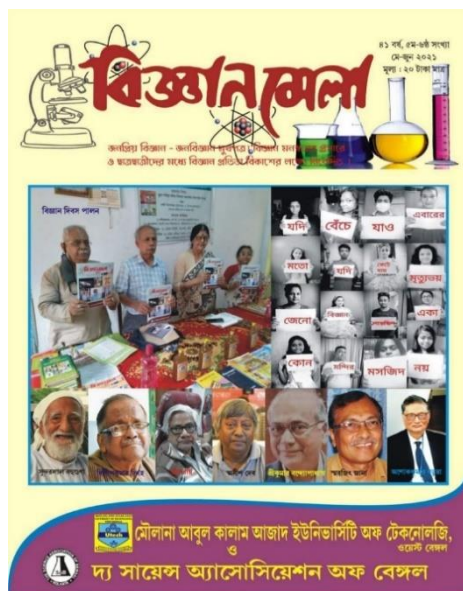
From June 2021 Bigyan Mela bimonthly popular science magazine is published jointly by Maulana Abul Kalam Azad Institute of Technology and The Science Association of Bengal.Advisor Professor Saikat Maitra,Hon'ble Vice Chancellor of Makaut W.B..The magazine is circulated in university website.

Interaction and discussion with Madhyamik and Higher Secondary Students

MAKAUT, W.B. , even being a University , has been continuing the effort for the development of school- student - community during the pandemic condition. Huge people have praised the effort. It has meanwhile finished a number of programme with the noble view.Arranging for the on - line classes for huge number of the students of Secondary and Higher Secondary level throughout West Bengal, was a part of the noble efforts and the students, School Teachers and guardians were overwhelmed for the same, as they were benefited from it. The arrangement for the Webiner classes took place for conservative 13 days on and from April 15, 2021. According to data, 35 selected teachers of different subjects from different schools in West Bengal took the classes and more than 2000 students watched the same
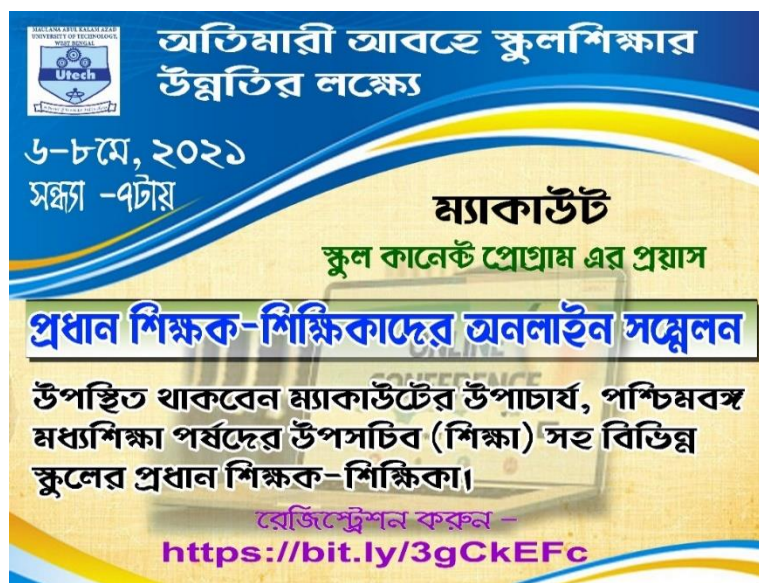
Headmaster and Headmistress Conclave

Lockdown for Covid - 19 bashed the school education. The students, Teachers and guardians were puzzled thinking how to face the critical situation. Closing of schools was developing two types of rudimentary problems. While one was the gap in imparting education and the second and the most unwanted issue was the mental health of student community. The MAKAUT Vice

Chancellor, Professor Saikat Maitra, whose brain is the library of innovative thinking, advised MAKAUT's School Connect Team to arrange for a Conclave of Head Master / Head Mistress. Consequently it was arranged through the webiner. It ran for consecutive 3 days on and from May 6, 2021 and around 500 Head of the Schools in West Bengal took part in it and expressed their view to mitigate the discussed problems. Most of them stressed in developing the student to student connection with Teachers for number of times. They unfolded that it would help the students to develop courage in themselves to face the hindrances caused from lockdown. If a teacher contacts a students through telephone directly or in any indirect way, they will feel the affection of the teacher to an individual student. That will help them to feel that they are not alone. It will help in bridging the gap that developed for closing the school and strengthen their mental health. When the mental health will develop through contact of School 'SIR' or 'MAM', they will become fit from all aspects. At least, the Heads of the institutions, disclosed such a view.

Sorrow – Depression-Joy

The Covid - 19 pandemic plight has pushed back the human being into Captivation in their

home through out the globe. As, we, the human being grow with the nature, with the flora and fauna, it is hardship for us to stay away from the mystic - vista and willingly accept the home - Captivation. So,

a good number of people turned sorrow and depressed subsequently. Even psychological problems developed in many of them. At this avenue, Maulana Abul Kalam Ajad University of Technology, W. B. has stepped up with the idea of organizing a series of lectures from May, 2021 on virtual platform on how to achieve the (bliss) benediction of Omniscient to keep the mind placid. It was the brainchild of MAKAUT Vice Chancellor, Professor Saikat Maitra that had snowballed in him ab - initio of the Covid pandemic. So, the nomenclature of thematic programme was done as 'Sorrow - Depression - Joy'.

Brikhshbandhu

The planet is facing critical environmental problems where scarcity of fresh and up to the mark quantity of oxygen in nature is a great matter of concern. Lack of plantation due to cutting of trees for Industrialization and extension of civilization are the rudimentary causes of the enthralling plight. Each one of the human being on the globe has the

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responsibility to try to mitigate it by plantation and it's a step in the direction. However, like many other arenas, MAKAUT, W. B., has also spring up to encourage students for plantation. The concerned programme was named as Briksha Bandhu. It was held on June 27, 2021. Pupils from various schools from Kolkata to Siliguri attended it.

World Environment Day Celebration

With the increase of mundane pollution, environment has appeared as a matter of grave concern. Albeit, June 5 is annually celebrated as World Environment Day and it is the principal vehicle for encouraging awareness and action for protection of environment, we, the human being should remain aware and active about it in the walk of daily life. However, as MAKAUT, WB, has extended its cooperative hand for the betterment of the society through many a social activities. Students from about 17 schools from various corners in West Bengal appeared the programme.

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Bigyaner Dishari for School Students

Involving School Students in ' Out - of - Syllabus', programme amid the lockdown was the target of MAKAUT VC, Saikat Maitra. Do he advised School Connect Team of this Technology University of West Bengal, to include the programme of ' Bigyaner Dishari' in the concerned list to encourage school students in knowing the Scientists, those are renowned worldwide from may, 2021. So, the plan was taken to involve Schools in the said programme where they would present the life and activities of various Scientists through power point presentations or speeches.

Tomader Katha

'Tomader Katha' was an unique Chancellor Professor Saikat as the school students have to lockdown for Covid 19, they are unable to meet their beloved Teachers. So they are in and a little disturbed in

idea of MAKAUT Vice Maiktra. According to him, been staying in home due are getting vexed as they intimate friends and a monotonous situation mind. With a view to

remove the monotony, MAKAUT Vice Chancellor Professor Saikat Maitra advised School Connect Team to arrange for the programme ' Tomader Katha'. It was an on - line programme where students from various invited schools attended and shared their feeling during lockdown. While it started on May 22, 2021, the next programmes on the issue took place on May 29 and June 27, 2021. Students from 11 schools took part in it.

Coding for Everyone

Coding is a part of computer learning and MAKAUT, WB. has arranged for teaching those whoever interested. This on line class was started on May 12, 2021. Then more 5 classes were held with last one on July 3, 2021. It will be continued. The Technology cell, Makaut, WB., in cooperation with School

Connect Team placed the classes and Head of the said Cell, Pritimoy Sanyal, takes the virtual classes. It is a cost free programme. V. C. Professor Saikat Maitra remained present in all classes.

Produce vegetables and fruits at your home without soil

Due to population explosion, the tilling lands are getting camphor out, de die in Diem. As corollary, the living in concrete jungles are escalating. So, the inclination of kitchen, flower and fruit gardens in the houses, especially in township is concomitant. But using soil, causes some problems for them. At this avenue, MAKAUT, WB, has embarked with the idea of hydroponics. It means farming without soil. At present, Corona has boost up the idea. It is also a cultivation

process comparatively of smidgen - expenses. Pritimoy Sanyal, Head of Technology Cell of MAKAUT, WB, taught the tit - bits of hydroponics in a few virtual classes through power point presentation, initiating on May 30, 2021. The next classes took place on June, 7,13, 20, & 21, 2021. Huge people were encouraged and inclined to initiate the hydroponics. According to

MAKAUT VC, Professor Saikat Maitra, amid pandemic, it is very fruitful to develop the hydroponics in rooftops and balconies.

Animated Presentation Training

As it is the age of Computer and the future also will gain pace on it, MAKAUT, W. B., stepped forward to help learning a few basic things of Computer, free of cost. Animation is one of the chapters of that. This on line training is for all. The School Connect Team has arranged for it in cooperation with Technology Cell of MAKAUT, W. B. Pritimoy Sanyal, and the Head of the Cell imparts the education of Animation. However, the class started on June 30, 2021.The second class was held on July 4, 2021.

State level Art Competition

As per advised Hon'ble Vice Chancellor sir, school connect team arranged for an online art competition. Nursery to 12 class students participated in the month of June.

State Level Yoga Competition

As per advised Hon'ble Vice Chancellor sir, school connect team arranged for an online art competition. Nursery to 12 class students participated in the month of June.

Course Awareness for Students

School connect team organized subject awareness program with the help of the concern departments of MAKAUAT, W.B. on May-June. 2021.

Enquiry

University is a place where there are hundreds of queries from outsiders and that should be met satisfactorily. Keeping this in view, the MAKAUT, WB, Honourable Vice Chancellor Professor (Dr.) Saikat Maitra decided to create a serious 'Cooperation Desk', to keep everyone satisfied regarding their queries. Subsequently, the 'Desk' was activated on & from June 5, 2021.Vice Chancellor instructed Supriya Tarafdar, the Convenor of MAKAUT, WB.'s School Connect Team to select a perfect member of his team to hand over the responsibility. Tarafdar selected Ashis Poddar for the same. According to report, Ashis Poddar has been discharging his responsibility with a profound satisfaction.

Setu Bandhan

We have created a what's app group for School teachers. Where we consult regarding educational development.

List of the School for Setu Bandhan Whatsapp Group

Anandapur school	Anokha Kunapara Free Primary School
Bankura Municipal School	Kotasur High School, Mayurerswar, Birbhum
Birohi School	Basantipur Ideal Academy for Girls
Chakdaha Purbachal Girls	Narkel danga High School
Chakdaha Ramlal school	Baksha High School
Fatepur school for Boys	Ramchandranagar High Schoo
Fatepur school for Girls	Naihati Adarsha Vidyamandir
Fulia Sikshaniketen	Baikunthapur GSFP School
Gopal Academy	Jagadishpur Balika Vidyalaya,Howrah
Jadavpur Vidyapith	Sanskrit Collegiate school.
Haripukuria School	Kalyani University Experimental High School
Kalna Maharaja	Howrah Jogesh Chandra Girls school
Kamalpur School	Dakshineswar Adyapeath Aannada Vidyamandir
Kanchrapara Municipal Poly. School for Boys	Gonsaidas Pual Acadamy
Kly. University Experimental High School.	Sudpur High School, East Bardhawan
Kly. Shikshyatan	Sutragrh Girls High School
Ghoshpara Saraswati Trust School.	Krishnachandrapur High School
Panpur School	Deyasa Aligram D.S.U Vidyalaya.
Baikunthapur Satish Smiriti Vidyamandir, (Rajbaria).	Santipur Municipal High School.
Rajlakshmi School	Galsi Kalimati Devi High School.
Santipur Public School.	Tatla Chandra Kishore Vidyapith
Halishahar Ramprosad Vidyapith	Fulia Sikshaniketen
Nawabgange High School H.S.	Chakdaha Co-operative Colony Vidayatan
Saratkumari Girls High School	Jhapandanga Sabitri Debi Balika Vidyalaya.
Nawabgange High School	Chadpara Balika Vidyalaya
Ghosh para Saraswati Trust Vidyapith	Bilsara Rabindranath High School
Bidhan Chandra Memorial Govt. Girls High School	Shree Bidya Niketan Jr. High School
Krishnachandrapur High School	Beler Dhanyakuria Madhyamik Vidyalaya (HS)
Chakdaha Kamalpur Adarsha Vidyapith	Bijoy Nagar High School
Madarihat Girls High School	Dakshin Sangur Karunamoyee Girls High School.
Kastodanga Tarak nath Vidyapith	Chakparan Kantakhali Belomoni Girls School (HS)
Jadavpur Adarsha Balika Vidyalya	Familiya School.
Sudpur High School, East Bardhawan	Bara Jaguli Gopal Academy.

Harindanga High School	Kishalaya Vidylaya High school

School connect Committee

Advisor:	Members:	Technical Person and Web Designer
1. Mr. Anup Kumar Mukherjee 2. Dr. Subhabrata Roychaudhury 3. Mr. Pradyut Kar **Convenor** Mr. Supriya Tarafder	1. Mr. Debabrata Biswas 2. Mr. Debobrata Das 3. Mr. Ashis Poddar 4. Ms. Somarani Bera 5. Mr. Rupak Roy	1. **Mr. Pritimoy Sanyal** 2. **Mr. Prem Kumar** **Photographer and Designer** ❖ **Mr. Amiya Kumar Chatterjee**

National Service Scheme (NSS)

NSS Report

Sixty-Five colleges affiliated to MAKAUT, WB has maintained one unit of NSS containing 100 volunteers each. One Programme Officer has been assigned in each college. The NSS volunteers under the supervision of the Programme Officer are performing the various NSS activities. Dr. Soumen Kumar Pati is acting as NSS Coordinator of MAKAUT, WB since 2019-2021.

List of Colleges affiliated to MAKAUT, WB having NSS Unit (2020 - 2021)

Colleges with Government Funded Unit	
Sr. No.	**Name of College**
1	Cooch Behar Government Engineering College
2	Government College of Engineering and Leather Technology
3	Govt. College of Engineering & Ceramic Technology
4	Govt. College of Engineering & Textile Technology, Berhampore
5	Govt. College of Engineering & Textile Technology, Serampore
6	Jalpaiguri Government Engineering College
7	Kalyani Government Engineering College

Colleges with Self-Financed Unit	
Sr. No.	**Name of College**
1	Academy of Technology
2	Asansol Engineering College
3	B.P. Poddar Institute of Management & Technology
4	Bankura Unnayani Institute of Engineering
5	Batanagar Institute of Engineering Management and Science
6	Bengal College of Engineering and Technology
7	Bengal Institute of Technology
8	Bengal Institute of Technology & Management
9	Bengal School of Technology
10	Budge Budge Institute of Technology
11	Calcutta Institute of Engineering and Management
12	Camellia Institute of Technology & Management
13	Camellia Institute of Engineering & Technology
14	Camellia Institute of Technology
15	Camellia School of Engineering & Technology
16	College of Engineering and Management, Kolaghat
17	Dr. B. C. Roy Engineering College, Durgapur
18	Dr. Sudhir Chandra Sur Degree Engineering College
19	Dream Institute of Technology
20	Durgapur Institute of Advanced Technology & Management
21	Future Institute of Engineering and Management
22	Future Institute of Technology

23	Gargi Memorial Institute of Technology
24	George College
25	Global Institute of Management and Technology
26	Gupta College of Technological Sciences
27	Guru Nanak Institute of Technology
28	Haldia Institute of Technology
29	Heritage Institute of Technology
30	Hooghly Engineering & Technology College & Development
31	ILEAD Institute of Leadership Entrepreneurship
32	Institute of Engineering & Management
33	Institute of Genetic Engineering
34	JIS College of Engineering
35	Mallabhum Institute of Technology
36	MCKV Institute of Engineering
37	Meghnad Saha Institute of Technology
38	Modern Institute of Engineering & Technology
39	Narula Institute of Technology
40	Netaji Subhash Engineering College
41	NSHM College of Management & Technology, Durgapur
42	NSHM College of Management & Technology, Kolkata
43	NSHM Knowledge Campus, Durgapur-Group of Institutions
44	Ramkrishna Mahato Government Engineering College, Purulia
45	RCC Institute of Information Technology
46	Regent Education & Research Foundation Group of Institute
47	Sabita Devi Education Trust - Brainware Group of Institutions
48	Saroj Mohan Institute of Technology
49	Siliguri Institute of Technology
50	St. Mary's Technical Campus Kolkata
51	St. Thomas' College of Engineering & Technology
52	Supreme Knowledge Foundation Group of Institutions
53	Swami Vivekananda Institute of Science & Technology
54	Techno India
55	Techno India – Banipur
56	Techno India College of Technology
57	Techno India, Kolkata
58	Techno India, Salt Lake

Volunteer Allocation: 65 * 100 (Unit 1) = 6500

No of Existing Programme Officers: 65 (One for each Unit)

Village/Slums Adopted (Name of the Adopted Village/Slum each College)

➢ Maulana Abul Kalam Azad University of Technology, West Bengal (MAKAUT, WB) – The MAKAUT NSS Unit adopted the Village- Mollabeliya, Block- Haringhata, District- Nadia.

➢ Institute of Engineering & Management, Kolkata - The IEM NSS Unit adopted the Village- Mahisbathan, Saltlake area, Jharkhali, Sundarban, 24 Parganas (N).

- Bengal School of Technology, Hooghly – The NSS unit, Survey and Health Awareness Camp at Budbud/Mankar DVC canal side and Kuchidanga (a Tribal Village nearby Mankar Village)
- MCKV Institute of Engineering-DAKSHINESWAR LOCALITY.
- Ramkrishna Mahato Government Engineering College, Purulia adopted a village near the college campus. Name –Aharpur, P.O.- ramamoti, Block- Joypur, District- Purulia, Pin-72103.

Distribution of necessary items in slum area by IEM, Kolkata

Food Distribution by RMGEC, Purulia

Survey and Health awareness by BST, Hooghly

Blood Donation Camps Organized (Name of Colleges conducted such camp with date and place of camps)

- Ramkrishna Mahato Government Engineering College, Purulia organized a blood donation camp in South 24 Parganas on 22nd June, 2020 to fill the crisis of blood during the pandemic situation of COVID-19. All blood donors had given 2 pieces of Egg, 1 piece of banana, 4 pieces of brown bread, 1 piece of cake, 2 pieces of sandesh, 1 glass of horlicks, 1 glass of glucose water as a Tiffin and fried rice, egg curry as a lunch time food. Total 37 peoples had donated blood and at the end 74 units of blood were collected.

- Bengal School of Technology, organized a blood donation camp on 14th May, 2019 at college campus. The students, Programme Officers and Faculty Members had participated in this Blood Donation Camp.
- Institute of Engineering & Management, Kolkata, organized two blood donation camp in the pandemic year, 2020-21. The students, Teacher and staff had donated blood.
- Bengal Institute of Technology, organized a blood donation camp in the year 2020-21 at college campus. The six students and Faculty Members had actively participated in this Blood Donation Camp.
- MCKV Institute of Engineering organized a BLOOD DONATION CAMP on 19-12-2020 where 2 males and 1 female volunteer donated Blood.

-

Blood Donation Camp by RMGEC, Purulia

Blood Donation Camp by BST   Blood Donation Camp by IEM

Trees Planted Programme Organized (Names of colleges conducted plantation programme with date and place of programme)

- Ramkrishna Mahato Government Engineering College, Purulia, organized a programme on the occasion of World Environment Day some of the NSS volunteers had plant some trees in their home garden and also around the village or town. It's time to aware and takes action to protect both our environment and Mother earth. They also made some videos for that day about to lean the environment.
https://www.facebook.com/505684449825806/posts/1040910272969885/

- Institute of Engineering & Management, Kolkata organized a Tree Plantation Programme on September, 2020 in the college campus.
- Bengal Institute of Technology, organized a Tree Plantation programme in the year 2020-21 at college campus. The 57 NSS volunteer was actively participated in this event.
- Camellia Institute of Technology and Management was organized a Tree Plantation programme through National Service Scheme at college campus. Around 1000 trees were planted on all the places of college and outside the campus and it is well maintained. For the proper maintains of these plants, the volunteers are divided into the several group.
- Jailpiguri Govt. Engineering College, Jalpiguri, organized several Plantation and campus cleaning programme at college campus, Jalpiguri in 2020-21.
- MCKV Institute of Engineering organized a TREE PLANTATION DRIVE from 01-04-2021to 06-04-2021where 10 male and 25 female volunteers Planted Tree and Write Slogan to make a safe healthy Environment.

Tree Plantation program by RMGEC, Purulia

Tree Plantation program by IEM

Tree Plantation program by MCKV

Other Activities Undertaken (Name of Colleges involved in other activities in online/offline mode)

➢ Govt. College of Engineering and Ceramic Technology, Kolkata, organized an **online Quiz on HIV/AIDS awareness program** and 30 students submitted responses within the given time slot among the 38 participants on 18-February-2021.

➢ Govt. College of Engineering and Ceramic Technology, Kolkata, organized another **online Quiz on HIV/AIDS awareness program** and 39 students submitted responses within the given time slot On 08-March- 2021.

➢ Govt. College of Engineering and Ceramic Technology, Kolkata, organized a Quiz programme on the occasion of **International Women's Day** on 08-March-2021 and 28 students submitted responses within the given time slot.

➢ Govt. College of Engineering and Ceramic Technology, Kolkata, also arranged a program on **International Women's Day** on 08 March, 2021 where 05 students delivered speeches on International Women's Day. The video lectures will be available in the given link.https://drive.google.com/drive/folders/1UmrK_ THRX_X5rKNPP4jxcXweUbqE UGlM?usp=sharing

➢ Institute of Engineering & Management, Kolkata, organized a **Street Dog Feeding** programme in July, 2020 at Saltlake campus, Kolkata.

➢ Institute of Engineering & Management, Kolkata, organized a **Cleanliness & Sanitization** Every Week for whole year at Saltlake campus, Kolkata.

➢ ILEAD Institute of Leadership Entrepreneurship & Development, Kolkata, organized an online programme on **International Women's Day** celebration on 8th March, 2021 via Zoom platform in the form of webinar by Dr Nayan Mitra and short program by our volunteers in the form of painting competition and poetry.

➢ ILEAD Institute of Leadership Entrepreneurship & Development, Kolkata, organized an online IDP career counselling webinar on "**Impact of Covid 19 on the future of study abroad**" on 9th March, 2021.

➢ ILEAD Institute of Leadership Entrepreneurship & Development, Kolkata, organized a programme the volunteers attend **Military Show by Indian Army** to commemorate 1971 Indo-Pak war held on Race Course Ground, Kolkata on 10th March, 2021.

➢ ILEAD Institute of Leadership Entrepreneurship & Development, Kolkata, celebrated the **Poshan Abhiyan** in campus by their volunteers on 23rd – 25th March, 2021 by conducting painting competition, nukkad natak. A webinar based on importance of nutrition was organised by a nutritionist Ms Chandoona Datta and psychologist Ms Shalmaly Chatterjee.

Cleanliness & Sanitization program by IEM   *Nukkad Natak performance by iLEAD*

➢ B.P. Poddar Institute of Management & Technology organized an online programme on the occasion of **Independence day** on 15.08.2020, celebrated through a webinar.

➢ B.P. Poddar Institute of Management & Technology organized an online programme on the occasion of **The Indian Constitution** on 26th November, 2020. There were near about 100 participants in the webinar, who had done p.p.t. presentation and gave speeches on the occasion, the video recording of the webinar was sent to the Directorate of N.S.S., New Delhi. Due to huge number of participants, the programme had to organize the in two shifts on the same day.

➢ B.P. Poddar Institute of Management & Technology organized an online competition programme on the occasion of **Teachers Day** on 5th September,2020. The result of these competitions were announced on the in the webinar.

➢ RCC Institute of Information Technology, Kolkata, organized 74th **Independence Day Celebration** by NSS Team on 15.08.20 20, RCCIIT Students Performed Recitation/Patriotic Song/Dance/any other performance related to Independence Day.

➢ RCC Institute of Information Technology, Kolkata, celebrated the **International Day for Preservation of the Ozone Layer**, Topic- Let us protect our radiation shield - for a better tomorrow on 16.09.2020. RCCIIT Students Performed Poster Presentation, Slogan Making, Tree Plantation etc.

➢ RCC Institute of Information Technology, Kolkata, celebrated the **Swachhata Divas** by NSS Team, RCCIIT on 02.10.20 20. The B.Tech Students (22 Female & 29 Male) performed Poster Presentation/Slogan Making Presentation/Tree Plantation etc.

➢ RCC Institute of Information Technology, Kolkata, celebrated a programme NATIONAL LEVEL WEBINAR on **Wild Life Week** by NSS Team, RCCIIT on 15.10.2020 and 16.10.2020.

➢ RCC Institute of Information Technology, Kolkata, celebrated the **Republic Day** on 26.01.2021.

➢ RCC Institute of Information Technology, Kolkata, celebrated the **International Women's Day** on 08.03.2021 among the Faculty & Staff Members.

➢ Bengal School of Technology, Hooghly, organized a Tree Plantation programme in the year 2020-2021.

➢ Bengal School of Technology, Hooghly, organized a programme on **Masks and Sanitizer distribution** in the year 2020-2021.

- Bengal School of Technology, Hooghly, organized a **Blood donation camp** in the year 2020-2021.

Swachhata Divas by RCCIIT

National Science Day Celebration by MAKAUT

- Dr. B.C. Roy Engineering College, Durgapur, organized an awareness on handling both **covid -19 and natural disaster a poster competition** on "How will the Eastern coast of India rebuild from the twin challenges of Covid-19 and Amphan cyclone." In June, 2020. Approximately 70 volunteers joined.

- Dr. B.C. Roy Engineering College, Durgapur, organized a one-day webinar on " **Covid -19 vaccination: Pros and cons** " on 03rd March, 2021. The Missions Hospital spoke on the reasons to get vaccinated. Total participants over google meet and YouTube crossed 200.

- Dr. B.C. Roy Engineering College, Durgapur, organized a one-day national webinar on "**Women: A nation's pillars of strength**" on 08th March, 2021 and organized by NSS unit in association with Grievance Redressal Committee. Total participants over google meet and YouTube crossed 300.

- Dr. B.C. Roy Engineering College, Durgapur, organized a poster competition on "Eradication of malnutrition" to celebrate **Poshan Pakhwada** on 30th March, 2021 with 70 volunteers.

- MCKV Institute of Engineering organized **BANDHAN ONLINE EVENT** on 02-08-2020. Celebrated RAKSHABANDHAN WITH HAND MADE RAKHIS.

- MCKV Institute of Engineering organized an ONLINE EVENT on **JANMASTHAMI UTSAV** on 11-08-2020,   DODDLE ON KRISHNA SWEET DISH MAKING.

- MCKV Institute of Engineering organized an ONLINE EVENT on **AZAADI** on 15-08-2020, collected ENTRIES THROGH WHATS APP & SHOWCASE THEIR TALENT THROUGH WEBINAR.

- MCKV Institute of Engineering organized an ONLINE EVENT on **QUIZ-O-SPORTS** on 29-08-2020. Celebrated NATIONAL SPORTS DAY with a QUIZ COMPETITION on SPORTS.

- MCKV Institute of Engineering organized an ONLINE EVENT on PHOTOGRAPHY CHALLANGE to celebrate **WORLD PHOTOGRAPHY DAY** from 11-08-2020 to 29-08-2020.

- MCKV Institute of Engineering organized a program at BHOGDEHI RESIDENT NEARBY AREA TO HELP THE **UNDER-PREVILEDGED WITH SOME GROCERIES DURING COVID-19 SITUATION** from 31-08-2020 to 30-09-2020.

Poster competition by B.C.R.E.C   *Helping program by MCKV*

- ➢ MCKV Institute of Engineering organized an ONLINE EVENT on **TEACHER'S DAY CELEBRATION** on 05-09-2020.
- ➢ MCKV Institute of Engineering organized a program on **BIRD FEEDER MAKING CHALLANGE** from 19-09-2020 to 30-09-2020 to make a Bird Feeder & Feed Birds.
- ➢ MCKV Institute of Engineering organized a program on **GANDHI JAYANTI** on 02-10-2020 to discuss for DEMOCRACY (DEBATE).
- ➢ MCKV Institute of Engineering organized a **WEBINAR ON MENTAL HEALTH DAY** on 10-10-2020 to find Purpose and Positivity in Life and the role of mental health for our overall wellbeing.
- ➢ MCKV Institute of Engineering organized a program on **DOING GOOD TO SOCIETY & POST IN SOCIAL MEDIA** from 10-10-2020 to 17-10-2020 to do GOOD to THE WELFARE OF THE SOCIETY.
- ➢ MCKV Institute of Engineering organized a program on **SAAJH MAKE UP COMPETITION DURING DURGA PUJA** from 20-102020 to 25-10-2020 to celebrate TRADITIONAL LOOK & MODERN LOOK.
- ➢ MCKV Institute of Engineering celebrated **DIWALI & CHILDREN'S DAY** at ORPHANAGE on 15-11-2020 to celebrate DIWALI & CHILDREN'S DAY.
- ➢ MCKV Institute of Engineering organized a program on DISNEY PARTY for **CHILDREN'S DAY CELEBRATION** on 15-11-2020.
- ➢ MCKV Institute of Engineering organized a program on **PARAKRAM DIWAS** on 23-01-2021 to CELEBRATE NETAJI'S 125th BIRTHDAY AS WELL AS NURTURE THE QUIZING & WRITING SKILLS.
- ➢ MCKV Institute of Engineering organized a program on **TECH FIESTA 2K21**from 11-02-2021 to 25-02-2021 where held the Front end website development, GAME DEVOLOPMENT USING PYTHON, GRAPHIC DESIGNING WEBINAR & COMPETITION.
- ➢ MCKV Institute of Engineering organized a program on **VASTRA (CLOTH) DISTRIBUTION** on 25-03-2021 to   help the POOR HABITATS NEAR DAKSHINESWAR SLUM AREA.

Cloth Distribution by MCKV

Workers' Day Celebration by RMGEC

- ➤ The NSS volunteers of Ramkrishna Mahato Government Engineering College, Purulia, made some Online **awareness posters during the pandemic situation of COVID- 19** to create awareness among the peoples which were posted in the state website and different social media. https://www.facebook.com/505684449825806/posts/1002892483438331/?sfnsn=wiwspmo&extid=fY1Djubrlv1x9o7U,https://twitter.com/rdnss_kolkata/status/1253748897673031684?s=08

- ➤ Ramkrishna Mahato Government Engineering College, Purulia, organized a program on **Birth Anniversary Celebration of Jamini Roy** in Online mode on 14th April, 2020. Sumit Dey an NSS volunteer of RKMGEC has drawn a picture of the pioneering artist Jamini Roy to give him a tribute on his 133rd Birth Anniversary. The main purpose of this activities is to keeping the mind of the students involve in different good aspects so that they are not get panicked and don't feel depressed in this pandemic situation of COVID-19. As well as they gained lots of cultural knowledge by doing all this kind of works.

- ➤ Ramkrishna Mahato Government Engineering College, Purulia, organized a **Food Distribution Event** 13th April, 2020. A NSS volunteer of RKMGEC had distributed some cooked foods like rice, egg curry, dal etc. to the peoples who lived in Santipur Railway Station, West Bengal.

- ➤ Ramkrishna Mahato Government Engineering College, Purulia, organized different **Awareness Videos** in Online mode. The NSS volunteers of RKMGEC made some videos during the pandemic situation of COVID-19 to spread awareness among the peoples. All videos are available in our college You Tube channel rkmgecytofficial@gmail.com . Some of them are posted in the state level websites also.
  Links of the videos:
  https://www.youtube.com/watch?v=6sLLiXjhB-o
  https://www.youtube.com/watch?v=IJuQIw1YS30
  https://www.youtube.com/watch?v=b4FAAc4bnC0&t=4s
  https://www.youtube.com/watch?v=8Gy9UpxCQHg&t=2s

https://www.youtube.com/watch?v=2yFEmcFdepU
https://www.youtube.com/watch?v=OUzODOeBtoQ
https://www.youtube.com/watch?v=mrEozuBOruk
https://www.youtube.com/watch?v=DUyG_gC2J3c&t=43s
https://www.youtube.com/watch?v=U0RQAEyYj5g
https://www.youtube.com/watch?v=AZtQgOidtB8
https://www.youtube.com/watch?v=u6kf8syUUYM
https://www.youtube.com/watch?v=FrGxykJ9mjU
https://www.youtube.com/watch?v=8vYSBM4YW40
NSS West Bengal:
https://www.facebook.com/505684449825806/posts/1025775141150065/?sfnsn=scwshmo&extid=wpnp3Ia8EaJoIQAS
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https://www.facebook.com/505684449825806/posts/1025773904483522/?sfnsn=scwshmo&extid=6yYWV5WLYZkF7rGS
https://www.facebook.com/505684449825806/posts/1025771627817083/?sfnsn=scwshmo&extid=RWdLvWj1TANwRwAu
https://www.facebook.com/505684449825806/posts/1007211356339777/?sfnsn=scwshmo&extid=AJDihXuZmi8M3Oq5

➢ Ramkrishna Mahato Government Engineering College, Purulia, organized an online drawing competition by The Bharat Scout & Guides, West Bengal on 26th April, 2020. Some of our NSS volunteers had participated on this competition.

➢ Ramkrishna Mahato Government Engineering College Purulia, through its NSS Unit and volunteer students took some initiative in the **relief activity to help fight in Covid – 19 pandemics**. A total of 29 appeals were received (17 local families around the college premise + 12 college students) for the relief and 24 of them could be served (17 local residents around the college + 7 college students). Each local family were given a cash transfer of Rs. 500 and each needy student family was given a cash transfer of Rs. 1000 on 27th April, 2020.

➢ The NSS Unit of Ramkrishna Mahato Government Engineering and Vivekananda Yuva Jagaran Sangha **distributed some food materials** like rice, pulses, soybean, sugar, among 100 families (saontal, nabasudra, muslim,huyea etc) of Egra, Medinipur on 26.04.2020.

➢ Ramkrishna Mahato Government Engineering College Purulia, organized **International Workers' Day** also known as Labour Day in some countries and often referred to as May Day. Every year 1st May, 2020 was celebrated this day for the Workers' whose contribution towards the society is priceless. To give a tribute to the Workers' our NSS volunteers made some drawings for them.

➢ Ramkrishna Mahato Government Engineering College Purulia, organized a program on the occasion of **100th Birth Anniversary of Satyjit Ray**, some of our NSS volunteers had made some beautiful pictures of him to give him a tribute on 2nd May, 2020.

➢ Ramkrishna Mahato Government Engineering College Purulia, organized a program on the **159th Birth Anniversary of Rabindranath Tagore** who was a great poet, writer,

music composer, painter and philosopher. To celebrate his birth anniversary our NSS volunteers had made some awesome handmade drawings, digital paintings and videos on 8th May, 2020.

Mother's Day Celebration by RMGEC   *Relief work by NSS volunteer of RMGEC*

➢ Ramkrishna Mahato Government Engineering College Purulia, organized a program on the occasion of **Mother's Day,** the NSS volunteers of RKMGEC had made some digital paintings, crafts and wrote poems etc. to express their love and gratitude towards their mothers as well as all mothers in the world.

➢ Ramkrishna Mahato Government Engineering College Purulia, the NSS volunteer of **distributed raw food materials** like rice, dal, potato, onion, salt, oil etc. among 25 needy families of Halisahar, North 24 Parganas, West Bengal during the pandemic situation of COVID-19 on 13th May, 2020.

➢ The NSS Unit of Ramkrishna Mahato Government Engineering College had organized an **online quiz competition** on 19th May, 2020 during the lockdown period to combat COVID-19 by creating awareness about Cleanliness, Sanitization & Social Distancing. Around 3000 students, NSS volunteers, faculty members, NSS programme officers, non-teaching staffs were participated in this quiz competition including our state IGOT training nodal officer, and Regional directorate of Kolkata, passing score was 40%. All the successful participants had got their certificates.
https://www.facebook.com/110858557294739/posts/116280273419234/?sfnsn=scwshmo&extid=6a80rJb6VW3Qejb7

➢ The NSS unit of Ramkrishna Mahato Government Engineering College, organized a two days online workshop on **Stress Management through Meditation** from 25th May to 26th May, 2020.

➢ The NSS volunteer of Ramkrishna Mahato Government Engineering College, distributed **some raw foods to the 200 families in 5 villages of Sundarban,** West Bengal on 1st June, 2020. Peoples who got effected by the Amphan Cyclone Strom that caused widespread damage in eastern India, especially West Bengal in May 2020 had given raw food materials as well as Tirpols who lost their houses**.**

- The NSS unit of Ramkrishna Mahato Government Engineering College, had organized a **National Level Webinar on World Environment Day** on 5th June, 2020 at 10 A.M onwards.
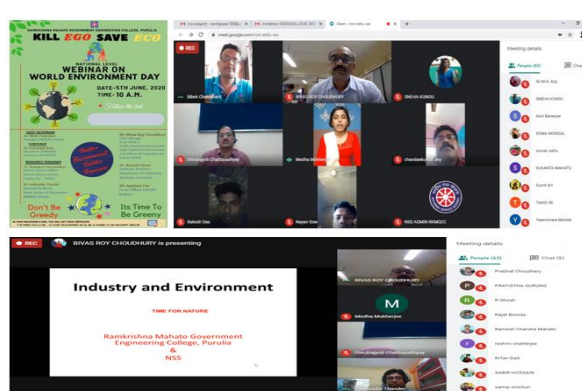- The NSS unit of Ramkrishna Mahato Government Engineering College, organized a program on the occasion of **World Environment Day** some of the NSS volunteers of RKMGEC had made some meaningful posters to create awareness among the people about to save the environment. Every picture had carries different meaning. Pictures are also available in national websites.
  https://youtu.be/SgrImPq1ZFk
  https://www.facebook.com/505684449825806/posts/1037858213275091/?sfnsn=scwshmo&extid=OVtAHOsBOJtdBNIV
- The NSS volunteers of Ramkrishna Mahato Government Engineering College had made some beautiful and meaningful pictures on the occasion of the **World against Child Labor Day** on 12th June, 2020.
  https://www.facebook.com/505684449825806/posts/1039614349766144/?sfnsn=scwshmo&extid=ysLYSx1PYHhxnFCG
- The NSS volunteers of Ramkrishna Mahato Government Engineering College had made some beautiful and meaningful picture on the occasion of the **International Yoga Day**. The International Day of Yoga has been celebrated annually on 21st June since 2015, following its inception in the United Nations General Assembly in 2014.
- The NSS volunteers of Ramkrishna Mahato Government Engineering College participated in **the MoYAS**, Govt. of India had organised Partnership launch event among Ministry of Youth Affairs & Sports (MoYAS) and YuWaah UNICEF on 22.07.2020. NSS volunteers and Programme Officer had participated on that event.
- Ramkrishna Mahato Government Engineering College organized the **Sanitisation and Management Team of Swachta Action Plan (SAP)**, RKMGEC under Mahatma Gandhi National Council of Rural Education (MGNCRE), Dept. of Higher Education, Ministry of Human Resource & Development, Govt. of India and NSS Unit of Ramkrishna Mahato Government Engineering College, Purulia organised an Online Drawing/Poster/Slogan writing competition on Swachta from 28th July to 15th August, 2020 on the occasion of 74th Independence Day of India. About 28 students were participated in that competition from different colleges around West Bengal. Among of them three students were selected for 1st, 2nd and 3rd position.
- The NSS Unit of Ramkrishna Mahato Government Engineering College, Purulia organized an Online **Fit India Freedom Run Competition** from 21st to 27th September, 2020.
- The NSS Unit of Ramkrishna Mahato Government Engineering College, Purulia organized one Day **Workshop on Social Entrepreneurship** (on the occasion of Gandhi Jayanti) on 02/10/2020.
- An Online Quiz Competition had been organized by the Red Ribbon Club under NSS Unit of Ramkrishna Mahato Government Engineering College, Purulia in collaboration with West Bengal AIDS Prevention and Control Society, Dept. of H&FW, Govt. of West Bengal, from 15th November to 1st December, 2020 on the occasion of **WORLDS AIDS DAY**.

- The Red Ribbon Club under the NSS Unit of Ramkrishna Mahato Government Engineering College, Purulia organized a **Health Camp and Health Awareness Camp** on 11th February 2021.
- The NSS volunteers of Ramkrishna Mahato Government Engineering College, Purulia made some **POSHAN** awareness posters, painting, slogans during **Poshan Pakhwada** to create awareness among the peoples which were posted in different social media.
- Techno International Newtown, Kolkata organized in Online mode an **Art Exhibition program** on 16th April, 2020.
- Techno International Newtown, Kolkata, organized a Webinar on "**What is special about CSR in India?**" on 27th April, 2020.
- Techno International Newtown, Kolkata organized an **Awareness video on Covid-19** on 10th May, 2020.

Health Camp by RMGEC   *World Environment Day Celebration by RMGEC*

- Techno International Newtown, Kolkata, organized a Webinar on "**Sustainability advancement measures in the new normal**" on 9th and 17th May, 2020.
- Techno International Newtown, Kolkata organized Article Writing programme in June, 2020 and July, 2020.
- Techno International Newtown, Kolkata, organized a Webinar on "**Corporate CSR fund utilization on post Covid-19**" on 22nd August, 2020.
- Techno International Newtown, Kolkata, organized a program on **Zero waste management week** from 7th September to 11th September, 2020.
- Techno International Newtown, Kolkata, organized **Branding pre and post Covid disease** on 23rd September, 2020.
- Techno International Newtown, Kolkata, organized a Webinar on "**Sustainable Development Goals, Sustainability – The New Normal**" on 13th October, 2020.
- Techno International Newtown, Kolkata, organized a Webinar on Webinar on "**Female Entrepreneurship and Sustainability in Emerging Economy**" on 23rd November, 2020.
- Techno International Newtown, Kolkata, organized **Digital Poster Making Programme** in December, 2020.
- Techno International Newtown, Kolkata, organized an Online **Poster Making Competition on Netaji Subhash Chandra Bose** on 23rd January, 2021.

- Techno International Newtown, Kolkata, organized **Video Making on Republic Day** on 26th January, 2021.
- Techno International Newtown, Kolkata, organized a **Foreign Cultural Exchange Programme,** throughout the months February, March and April, 2021.
- Government College of Engineering and Textile Technology, Hooghly, the volunteer raised fund and continue their service to **arrange foods for the strict dweller** at various places near to Serampore.
- Government College of Engineering and Textile Technology, Hooghly, the NSS volunteers also raised fund for NGO to provide **relief to people of Sundarban Area** of North 24 Paraganas, West Bengal.

Against Child Labour Day Celebration by RGMGC   *Food Distribution Program by GCETT*

Report of Technical Education Quality Improvement Programme (TEQIP) for 2020-21

TEQIP III Activities:
- The total expenditure incurred during the Financial Year 2020-2021 was Rs.2,24,68,793.
- During the financial year 2020-2021 following are the expenditure incurred under the heads

  Procurement   -   Rs 1,67,11,094.00

  Academic   -   Rs 44,41,951.00

  Incremental Operating Cost -   Rs 13,15,748.00

- Online Performance Audit was conducted during 23rd – 25th February 2021 and total expenses was Rs. 15,000.00/-

Trainings/ Workshops/ Meetings Attended/Organized:
1. Faculty Development program on 'Applied Mathematical Skills for Science and Engineering using contemporary tools' was held during 14-18 September 2020 by Prof (Dr) Sukhendu Samajdar and total expenses were incurred Rs. 52000/-
2. 5-day Workshop on Cloud, IoT and Data Science was held during 18 - 22 September 2020 and total expenses were incurred Rs, 32000/-
3. Workshop on Cryptology was held during 15-19 September 2020 and total expenses were incurred Rs. 19000/-
4. Workshop on Robotics was held during 29 Aug 2020 - 2 sept 2020 and total expenses were incurred 23600/-
5. Workshop on Big data analytics was held on 18th September 2020 and total expenses were incurred Rs. 15000/-
6. Student orientation programme on data science was conducted on 7th September 2020 and total expenses were incurred Rs. 9000/-
7. workshop and hands - on training on bio-informatics and its recent application was conducted during 10-11 September 2020 and total expenses were incurred Rs.12000/-
8. FDP on digital forensic & ethical hacking was conducted during 16-20 September 2020 and total expenses were incurred Rs. 90000/-
9. FDP on Trends in Bio-Technology was conducted during 15-19 September 2020 and total expenses were incurred Rs. 99999/-
10. FDP of Advance Engineering Mathematics was conducted during 17/09/2020 to 19/09/2020 and total expenses were incurred Rs. 29000/-
11. FDP on COMPUTATIONAL TECHNIQUES IN CHEMISTRY & MATERIALS SCIENCE – HOW TO USE CONTEMPORARY SOFTWARE TOOLS was conducted during September 2020 and total expenses were incurred Rs. 54000/-
12. FDP program of Intelligent Computing was conducted during 11th – 15th September 2020 and total expenses were incurred Rs. 25000/-

13. workshop on "An introduction to computational biology with R'' was conducted during 21st – 25th September 2020 and total expenses were incurred Rs. 15000/-
14. 5-days Workshop "Challenges in Cyber Security and Cyber Crime" was conducted during November 22-26, 2020 and total expenses were incurred Rs. 28000/-
15. 5 days FDP of "Scope and Opportunities of Analog VLSI Design in Industry and Academia: Concepts to Full Custom Chip Design" which was conducted from 21/09/2020 to 25/09/2020 and total expenses were incurred Rs. 38000/-
16. 5 days workshop on Next generation Big Data biology for fituristic research was conducted during last week of September 2020 and total expenses were incurred Rs. 15000/-
17. FDP on"The Art and Craft of Scientific & Technical writing From A to (Almost) Z." was conducted during September 2020 and total expenses were incurred Rs. 26000/-
18. one day workshop on "Application of Machine Learning and Security Techniques in Smart Healthcare" was conducted on 6th December, 2020 and total expenses were incurred Rs. 6000/-

Papers presented and Training/course done by Faculty / Students / Staffs/ Officer and expenditure incurred thereof:

Sl. No:	Name	Student/Faculty Details	Department	Course Details	Amount Rs…
1	Arindam Sain	PhD Student	Biotechnology	Registration Fee for 3 MOOC Course	3000
2	Dr. Debdut Naskar	Faculty	Biotechnology	FDP from NPTEL	617
3	Dr. Saikat Basu	Faculty	CSE	NPTEL	1000
4	Dr. Saikat Basu	Faculty	CSE	NPTEL	1100
5	Mohitesh Ch Agarwal	Student	CSE	B.Tech ,CSE (Roll No.: 30000116016) Registration fee for Paper presentation to International Conference, IEMIS 2020	5000
6	15 Students	Student	IEM	Expenditure for participation in short term course on Implementation of Ergonomics in Manufacturing	45990

				Industries from 24th to 28th November,2019	
7	6 2nd year Students	Student	IEM	Expenditure for attending conference for paper presentation at IIT Kanpur on 19th December- 21st December,2019	72600
8	Dr. Saikat Basu	Faculty	CSE	Registration fee for PhD fee	3000
9	Sunit Roy	Staff	TEQIP-III	Reimbursement of SAP course registration fee	24000
10	Pramod Kumar Bhagat	Staff	TEQIP-III	Permission for reimbursement of SAP course registration fee	30000
11	Dr. Saikat Basu & Suraj Raj	Faculty	CSE	Reimbursement of Registration Fee for Paper presentation at ICCNCT-2020	7500
12	Suparna Biswas & Sohail Saif	Faculty	CSE	Reimbursement of Registration Fee for Paper presentation at IEMIS 2020 (paper Id 330)	6000
13	Dr. Saikat Basu	Faculty	CSE	Reimbursement of Registration Fee for Paper presentation at I3CS 2020 for "Discernment of Human Stress Using Generic Computer-Aided Tasking—A Review"	3000
14	Dr. Saikat Basu	Faculty	CSE	Reimbursement of Registration Fee for Paper presentation at I3CS 2020 for Statistical Analysis of Emotional Response through Physiological Signals	3000
15	Atanu Ghosh, Debashis De, Koushik	Faculty	CSE	Reimbursement of Registration Fee for Paper presentation at	9500

	Majumder			ICICIT019	
16	Sima Das	Student	M.Tech, CSE	Reimbursement of Registration Fee for Paper presentation at IEEE Connect 2020	4887
17	Archita basu	Student	M.Tech, IT	Reimbursement of Registration Fee for Paper presentation at ICICCT 2020	7200
18	Santanu Phadikar	Faculty	CSE	Reimbursement of expenditure made towards attending conference ICMC 2020	8500
19	Dr. Atri Bhowmik (Finance Officer)	FO	MAKAUT,WB	Reimbursement of Registration fee for Coursera on International Leadership & Organisational Behaviour	2140
20	Dr. Debashis De	Faculty	MAKAUT,WB	Reimbursement of 1page over length charge for IEEE transaction on Nanotechnology	15254
21	Saikat Basu	faculty	MAKAUT,WB	Reimbursement of NPTEL exam fees	1100
22	Debasis De	faculty	MAKAUT,WB	reimbursement of 1 page over length charge IEEE	15965
23	Atonu Ghosh	Student	M.tech, CSE	ICMC 2020 Registration Fee Reimbursement	8000
24	Suparna Biswas	Faculty	MAKAUT,WB	Reimbursement claim for registration fee of NPTEL Internet of Things Moocs	1100
25	Debdut Naskar	Faculty	MAKAUT,WB	reimbursement of FDP course fees (NPTEL)	600
26	Sohail Saif	Student	CSE	Reimbursement of NPTEL Exam fees	2000
27	Manthan Maity (CR)	16 Student	M.Tech, IEM	Reimbursement of Registration fees for Online Short Term Training Program	18880

Research Assistants under TEQIP III: It is reported that the following Research Assistants are currently being supported namely:
1. Suman Mitra
2. Biswajit Jana
3. Priti Deb
4. Ishita Bhakta

Submission of thesis and resignation by Research Assistants under TEQIP III
1. Kunal Biswas (Research Assistant) has submitted his thesis successfully and discontinued his tenure from October 2020.
2. Sadip Midya (Research Assistant) resigned and discontinued his tenure from March 2021.

Extension of Research Assistantship under TEQIP III
- Three months extension (April 2020-June 2020) of assistantship to the Research Assistants under TEQIP-III was granted by the Research Assistant Committee and competent authority.
- Further 3 months extension (July 2020-September 2020) of assistantship was granted by the competent authority subjected to availability of fund and continuation of TEQIP-III project.
- Further 3 months extension (October 2020-March 2021) of assistantship was granted by the competent authority subjected to availability of fund and continuation of TEQIP-III project

Purchase Committee member under TEQIP III
- The Hon'ble Vice Chancellor, MAKAUT, WB – Chairman
- The Finance Officer, MAKAUT, WB -Member
- The Assistant Registrar, MAKAUT, WB - Member
- Prof. Debashis De, Director, School of Computational Sciences - Member
- Prof. Indranil Mukherjee, Director , School of Management Sciences - Member
- Prof. Raja Banjerjee, Director, School of Biological Sciences - Member
- Prof. Sibamoy Dasgupta, Director, School of Engineering Sciences - Member
- Dr. Somdatta Chakravorty, Head of IT Department &Director, IQAC Cell- Member
- Dr. Debdyut Naskar, Nodal Officer Finance, TEQIP III - Member
- Dr. Ranjita Biswas, Nodal Officer Academic, TEQIP III - Member
- Dr. Debasis Giri, TEQIP Coordinator - Member
- Ms. Tufan Naiya, Nodal Officer Procurement, TEQIP III – Convenor

TEQIP III Team:

1. Dr. Debasis Giri, TEQIP III Coordinator
2. Dr. Ranjita Biswas, Academic Nodal Officer
3. Dr. Sriparna Saha, joint Academic Nodal Officer
4. Dr. Debdut Naskar, Finance Nodal Officer
5. Dr. Tufan Naiya, Procurement Nodal Officer and Twinning coordinator
6. Dr. Santanu Phadikar, Start-up Coordinator
7. Dr. Pradyut Sarkar, Joint MIS Nodal Officer
8. Mr. Bivas Mallik, Joint MIS Nodal Officer
9. Dr. Tapash Ghosh, Environmental Coordinator

Members of BoG Committee : Last BoG Meeting held on March 14, 2020

Sl No	Name	Designation
1	Prof. Saikat Maitra	Vice Chancellor, and Chairman of TEQIP-III, MAKAUT,WB
2	Dr. Partha Pratim Lahiri	Registrar, MAKAUT, WB
3	Dr. Atri Bhowmik	Finance Officer, MAKAUT, WB
4	Dr. Md. Aftabuddin	Information Scientist, MAKAUT, WB
5	Dr. Debasis Giri	TEQIP III Coordinator, MAKAUT, WB
6	Dr. Ranjita Biswas	Nodal Officer, Academic TEQIP – III, MAKAUT, WB
7	Dr. Debdyut Naskar	Nodal Officer Finance TEQIP – III, MAKAUT, WB
8	Dr. Tufan Naiya	Nodal Officer, Procurement TEQIP – III, MAKAUT, WB
9	Dr. Santanu Phadikar	Start up Coordinator, MAKAUT, WB
10	Prof. Dhrubajyoti Chattopadhyay	Vice Chancellor, Amity University Kolkata
11	Prof. Sankar Kumar Ghosh	Vice Chancellor, Kalyani University
12	Prof. Basab Chaudhuri	Vice Chancellor, West Bengal State

		University
13	Prof. Nabendu Chaki	Prof. Dept. of CSE, CU
14	Prof. Biswajit Ghosh	Vice Chancellor, TNU
15	Dr. Tanushyam Chattopadhyay	Senior Scientist, TCS Research and Innovation LABS
16	Dr. Gairik Das	Professor, Dept. of Management. IISWBM
17.	TEQIP-III COORDINATOR	IUST, J&K
18	TEQIP-III COORDINATOR	Jadavpur University, WB

About MAKAUT Placement

MAKAUT, WB is firmly heading towards the betterment of students' employability through its Training & Placement Cell and consistent regular interaction with Industries. The affiliated Colleges/Institutions also receive adequate support for the employment for students through the MAKAUT Placement Cell constituted by the University. MAKAUT, WB arranges regular guest lectures inviting professionals from industry to mentor the students about the expectations of the industry, corporate etiquette etc. The students are given adequate opportunity of interaction with these experts.

MAKAUT Placement Committee

- Honorable Vice Chancellor Prof.(Dr) Saikat Maitra
- Honorable Registrar MAKAUT , Prof.(Dr.) Partha Pratim Lahiri
- Training & Placement Officer , Dr. Anandarup Sarangi
- Advisor Prof. Manas Ghosh.

Road Map of MAKAUT Placement Cell

→ Pre Placement Training (Technical + Aptitude)

→ Group Discussion

→Skill Gap Analysis

→Regular Interaction with Student and Industry in form of Seminar / Workshop

Model Of Student Involvement

Technical Seminar	Technical Workshop
Value Added Training	Domain Knowledge Training
Internship	Industrial Training
Industry Visit	Guest Lecture By Eminent Personality

Highest Package Statistics
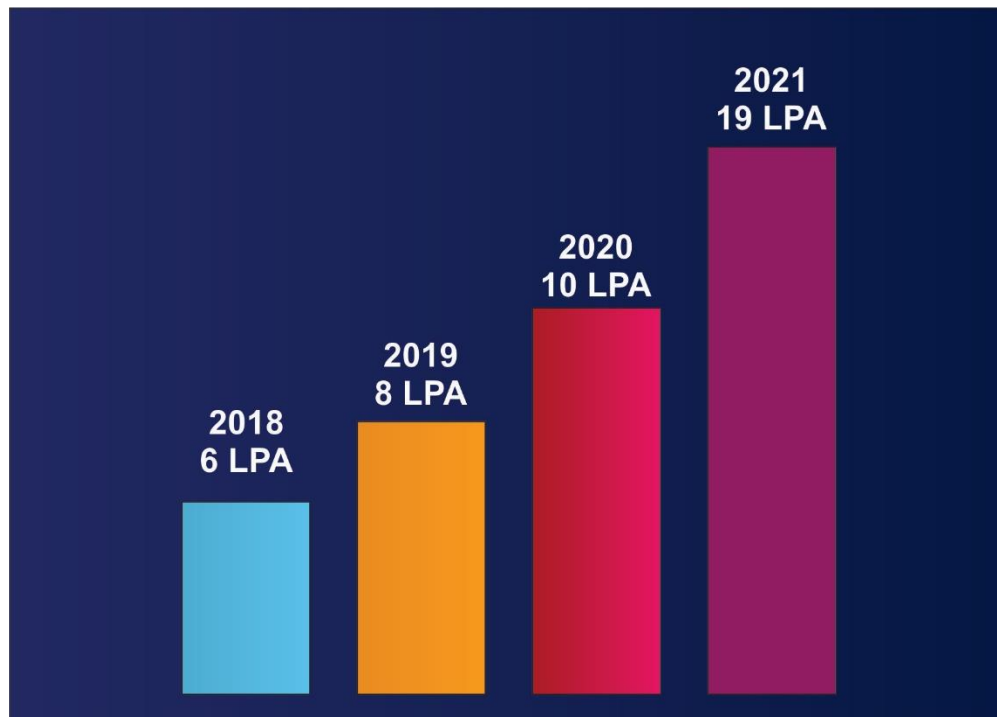
Activity of Placement Cell of MAKAUT

- Soft Skill Training
- Entrepreneurship
- Grooming

Industry Webinar - Corporate Classroom

Cubix International

Mind & Beyond

Vodafone-Idea Ltd

Techno Electric & Engineering Limited

Placement & Internship Details
- 19 L Package Zeotap
- 9 L Package Infosys
- 5.5 L Package Congnizant
- 4 L Avg. Package TCS

Placement Highlights

Close to 100 Students of Graduate & Post Graduate have been placed from various department of IT, CSE, Bio Technology, Food Science & Nutrition, Industrial Engineering & Management, VLSI Micro Electronics, Geoinformatics, Management.

Name of Company Visited (Partial List)

Infosys	TCS	Dell	Amazon
IBM	Wipro	Accenture	Suda (Govt. of West Bengal)
EMDEE Electronics	Technocon Services	Sunera Technologies	FMC
BYJU'S LTD.	Wings Elevator	SP Diagnostics	Apollo Hospitals
Techno India Dama	Congnizant Technology Solutions	AAABYS Technologies Services	Flipkart

And Many More Companies

Project Implemented

Due to COVID19 Effect Entire World Changed, MAKAUT Placement Cell ready to accept the challenge for the society. Some of Activity initiated by the cell as follows:

1. Video CV Preparation

2. E - Interview Prep Camp

3. Online Education System - Benefits

4. How to Use LMS, CMS etc

5. Online Placement Portal & App Developed

6. Moocs Developed in Associated with NBSP 1st time in Eastern India.

Some of Our Associate Training / Industry Partner

- National Institute for Industrial Training*

- National IT and Cyber Security Research Association*

- Indian Computer & Technical Association*

- Entrepreneurship Development & Research Council of India**

- Association of Training & Placement Officer*

- Industry Institute Collaboration Association*

- Cyber Security Knowledge Sharing & Research Council**

- Council of Industrial Engineering & Management**

- Indian Institute of Machine Learning*

- Data Analytics Skill Association*

- Blockchain Skill Development Association*

- Eminent Association of Philosophers in Science & Technology**

  Registered Civil Society Under Govt. of WB
  Registered Under MCA Govt.of India , Under Section 8 , Licensed By Govt.of India (Non Profit Status)

Table For Significant Recruitment 2020-21

Sl. No.	Students Name	Company Name
1	Amrit Anand	Infosys
2	Suraj Biswas	Cognizant Technology Solutions
3	Sachin Rastogi	Infosys
4	Arindam Chakraborty	Infosys, Tata Consultancy Services, Cognizant Technology Solutions
5	Soumak Paul	Cognizant Technology Solutions, Tata Consultancy Services
6	Pritha Mondal	Cognizant Technology Solutions, Infosys, Accenture
7	Puneet Rai	Cognizant Technology Solutions, Infosys
8	Samrat Chowdhury	Cognizant Technology Solutions
9	Udita Sen	Cognizant Technology Solutions, Infosys, Subex
10	Rakesh Raj	Cognizant Technology Solutions, Tata Consultancy Services, Infosys
11	Pijush Barman	Cognizant Technology Solutions, Tata Consultancy Services, Infosys
12	Diptangsu Samaddar	Cognizant Technology Solutions, Infosys, Tata Consultancy Services
13	Arijit Dey	Cognizant Technology Solutions, Infosys, Tata Consultancy Services
14	Akash Das	Infosys
15	Soumya Dutta	Infosys
16	Souvik Das	Infosys
17	Amrita Gain	Infosys, Tata Consultancy Services
18	Sayendeep Mahanty	Infosys
19	Kumar Aman	Infosys
20	Rashmi	Infosys
21	Debolina Das	Infosys
22	Shubham Kumar	Infosys
23	Md Shahid	Infosys
24	Pritam Ghosh	Tata Consultancy Services
25	Amit Das	Tata Consultancy Services
26	Dibya Kumari Shaw	Tata Consultancy Services
27	Sahadat Hossain	Tata Consultancy Services
28	Ritwik Ghosh	Exavalu, Accenture
29	Suraj Sarkar	Accenture
30	Debdattaa Kar	Accenture
31	Supratim Saha	Hashedin
32	Debjyoti Saha	Accenture, Subex

33	Shivam Kumar	Accenture
34	Nabin Mondal	Tata Consultancy Services
35	Anant Narayan Singh	Tata Consultancy Services
36	Indranil Mahapatra	Tata Consultancy Services
37	Sajid Alam	Tata Consultancy Services
38	Sourav Karmakar	Sunera Technology
39	Anindra Nandi	Sunera Technology
40	Ashis Sadhukha	Sunera Technology
41	Niraj Kumar	Sunera Technology
42	Vinay Ranjan	Sunera Technology
43	Srijita Karmakar	SUDA GOVT OF WB)
44	Ayesha Khatun	Tata Consultancy Services
45	Sk Sohel	Tata Consultancy Services
46	Subhrajeet Sen	Sunera Technology
47	Swapnadip Sahoo	Sunera Technology
48	Sagardeep Ghosh	Sunera Technology
49	Joyobrata Dutta	Sunera Technology
50	ASISH SADHUKHAN	SUDA (GOVT OF WB)
51	POOJA KUMARI	TCS
52	PRASUTA DEY	TCS
53	RAHUL PAUL	TCS
54	RAJESWARI DAS	TCS
55	BASID ALI	SP DIAGONASTICS
56	ANKIT AGARWAL	KOLKATA MARINE ENGG SERVICES
57	SOUVIK DEBNATH	KOLKATA MARINE ENGG SERVICES
58	MADHUBANTI SUR	AABYS IT LTD
59	RANJOY BHOWMICK	TCS
60	RUPESH BANNERJEE	TCS
61	S SNEHA	TCS
62	S MAITY	TCS
63	TAPASWI CHAKRABORTY	TCS
64	S RASTOGI	TCS
65	KOUSTAV CHAKRABORTY	TECHNOCON SERVICES
66	SUDIP PAL	TECHNOCON SERVICES
67	SANCHITA MONDAL	EXAVALU
68	ANANYA CHATTERJEE	SUDA (GOVT OF WB)
69	SOUMIK JASH	SUDA (GOVT OF WB)
70	SULAGNA KUNDU	SUDA (GOVT OF WB)
71	SUDIPTO BISWAS	OMICS INTERNATIONAL
72	ARIF MD KHAN	TECHNOCON SERVICES

73	PRASHANT RANJAN	INFOSYS
74	ASHISH KUMAR	INFOSYS
75	GREEN MANISH	INFOSYS
76	MD WAQAR KHAN	INFOSYS
77	SAGNIK BASU	INFOSYS
78	KARAN KUMAR	INFOSYS
79	RISHAV KUMAR	INFOSYS
80	NUTAN HOTWANI	INFOSYS
81	PRASANNA THAPA	INFOSYS

Report from the office of the Finance Officer

Financial Status Academic Globalisation and Technology related change drivers and constantly reshaping the landscape of the higher education. The University has tried its level best to accommodate all requirements of the Departments with its own resources generation.

The Finance Department works under supervision of the Finance Committee, Executive Council and under overall control of the Vice Chancellor. The Department puts its full endeavour to act as Academic Facilitator to provide every positive support to the Academic Activities and R & D Activities of the different Departments optimising resources in most productive manner. MAKAUT,WB strictly follows Cash-Less Transaction Policy. All Transactions take place only through Banks/Debit Card/ Credit Card. It may be mentioned here that all Investments are made following State Govt. Norms by the Investment Committee. The University maintains proper Pay Roll system and all salary payments are made to the employees through Bank Transfer only. Provident Fund Statements are issued to the employees regularly subject to the updation of interest by the respective State Govt. Authority. There is a Project Management Cell which deals with all Projects and Programmes of the University. Each and every Project/Programme has got its respective Savings Bank Account of which the Finance Officer and the Project/Programme Coordinator are the joint signatories. Accounts of all Projects/Programmes are audited regularly according to the requirements of the Funding Agencies.

MAKAUT,WB has got a Student Welfare Fund for both in-house and students of the Affiliated Colleges. In case of accidental death of the working parents, 50% of the Tuition Fee payable, is supplemented from the fund and rest of the amount is waived by the college concerned. The Fund is also utilized for treatments of the students in case of accidents. MAKAUT,WB has introduced the Group Mediclaim Policy for Faculties, Officers and Non-Teaching Employees of the University at a subsidized rate. The University has a transport pick-up system for the employees of the University.

The budget is also being reconstructed in the form of Integrated Planning linking vision, priorities, and people in a flexible system of evaluation, decision-making and action. We have shifted to our state-of-the-art new campus at Haringhata. Sufficient budget provisions have been made to make it a Green Campus as far as possible. Provisions have been made to develop new technology-advanced learning spaces for new employment generating courses. Provisions have also been made to create a good campus life combining excellent physical facilities with amenities. The Department goes through the Budgetary Control System every year by preparing revised budget for the current year and Proposed Budget for next FY. The Finance Department prepares the University Budget in consultation with the Departmental Heads to reflect the Academic Vision in the Departmental Budget Allocations. We have also allotted substantial amount for the new construction of buildings which are urgently required for accommodating academic and research activities of the university. To ensure excellence, efficiency, affordability, accountability, access and transparency, we have tried to allocate resources for core instructional support needs such as instructional equipment, adoption of updated technology and other physical facilities for all Schools to achieve Institutional Planning Goals of the University.

In the following projection the summary of budgeted expenditure has been given along with the Pie Chart to have a clear view of the Expenditure patten during the Financial Year 2021-2022.

Summary Of Expenditure

Code	Head	Budget Estimate 2021-22
	TOTAL OUTFLOW SALARY COMPONENT	229,211,339
	EXAMINATION EXPENSES	155,500,000
	OTHER OVERHEAD EXPENDITURE	328,239,000
	CAPITAL EXPENDITURE	1,219,439,054
	TOTAL	**1,932,389,393**
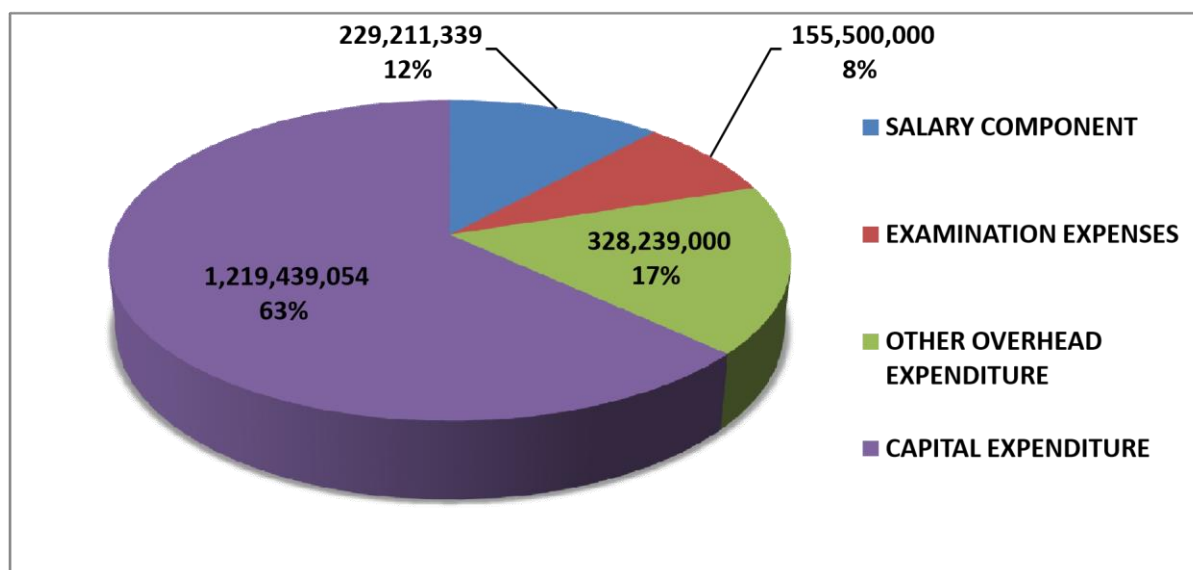
The prospective sources of budgeted income is projected in the following statement and the Pie Chart for clear understanding.

Summary of Income

Code	Head	Budget Estimate 2021-22
	TOTAL INFLOW GRANT FROM GOVERNMENT FEES FROM STUDENT AND COLLEGES OTHER RECEIPTS **TOTAL**	854,343,369 685,022,600 334,608,500
		1,873,974,469
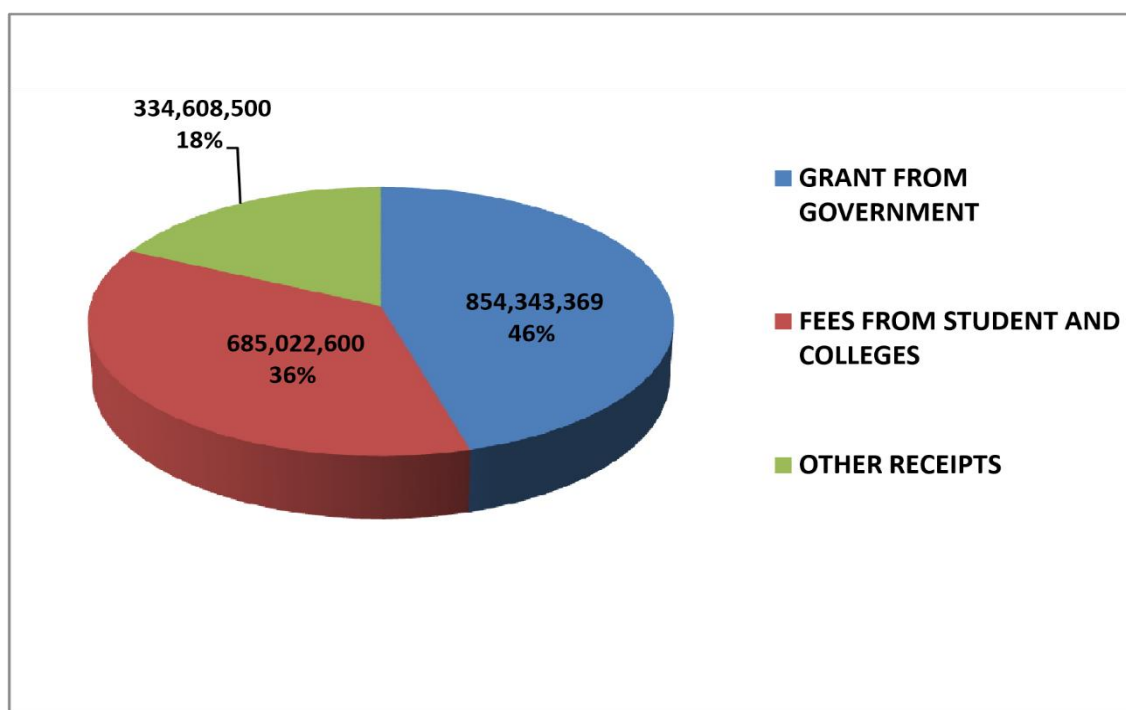
The accounts of the University are subject to Certification Audit by a Chartered Accountants firm after which it gets audited by the Examiner of Local Audit Department of the CAG.

The Final Accounts of the University has been prepared up to FY 2019-20 and the Audit of the Final Accounts has been completed up to the year 2018-19 and the audit the year 2019-20 is expected to be completed very soon. The Audited Statements of the UGC Plan Grants had

been sent to the UGC in their prescribed format. The University has tried its level best to make best use of the RUSA Grants although the PWD and WBREDA are yet to complete/initiate their jobs for which substantial fund had been given to them as mobilisation advance. The World Bank sponsored TEQIP III Grants had been utilised according to the requirements of the different departments and Utilisation Certificates were sent to the NPIU in time.

The WTL, a State Govt Undertaking had supplied the cloud based University e-Governance System which all departments have already adopted. The Finance Department has also shifted to the new ERP system and it is gradually moving towards a stabilised platform.

Partnership Programme taken in 2020-21

Since 2018-19, MAKAUT has been taking up the role of monitoring and mentoring Partner Institutes which would offer Degree / Diploma / Certificate courses under direct administrative, academic, and financial supervision of the University. These Institutes could be regarded as some kind of Off-Campus centres of the University. The aim is to bestow the high-quality teaching-learning practices of the University to the students at these Institutes, expand the student base of the University, use the pooled resources of these organizations in a synergistic manner so as to help the University elevate its academic standards and thus foster quality professional education in West Bengal. In the year 2020, Nine Institutions took part in admitting students for UG & PG Courses under the head of Partnership Mode. Those are:

- Eastern Institute for Integrated Learning in Management (EIILM), Kolkata with six UG courses with a total intake of 620
- Webel DQE with two UG courses with intake of 90
- BSE Institute Ltd with one UG course and an intake of 60 seats.
- JT Aviation Institute of Airhostess Management with two courses (1-PG & 1-UG) with an intake capacity of 240
- George College, Narendrapur with 8 courses (6UG & 2 PG) and a total intake of 480
- George College, Asansol with 6 UG courses total intake of 360
- Bankura Unnayani Institute of Engineering with 1 UG course and intake of 30.

Total Intake Capacity: 3050(UG); 400(PG) Total Admission: 963
There was a drop in admission in 2020 due to severe COVID-19 pandemic which started in the Month of March 2020 and continuing till date. During this year (2020-21) different Partner Institutes under MAKAUT have started many need based programmes (Certificate, Diploma and Post Graduate diploma) which are not only important in the present context but also have prospects for job opportunity after acquiring the skilled that are imparted in those job oriented courses.

In the year 2020-21, after the inclusion of few more Partners, the no. of students' enrolment increased to 398 in Certificate(3 months), Diploma(6-12 months duration) and PG Diploma (12-24 months duration) courses. As those courses are allowed to start in two sessions i.e. in January and July, it is expected that the no. of students' enrolment will be almost double.

Members of the Partnership Cell:

- Prof Ananta Kumar Das
- Mr Sudiptanshu Roy Chaudhuri

List of Colleges & Its Courses Affiliated by Maulana Abul Kalam Azad University of Technology, West Bengal (formerly West Bengal University of Technology) for the Academic Year 2020-2021 (As on 25.01.2021)

SLNO	MAKAUT,WB COLLEGE CODE	COLLEGE NAME	COLLEGE ADDRESS	LEVEL OF COURSE	NAME OF COURSE	INTAKE AS PER MAKAUT, WB 2019-20	INTAKE AS PER MAKAUT,WB 2020-21
1	101	JALPAIGURI GOVERNMENT ENGINEERING COLLEGE	JALPAIGURI GOVT. ENGG COLLEGE, JALPAIGURI - 735102 WEST BENGAL Tel: (03561) 255132 Telefax: (03561) 255131 E-mail: slg_jgec@ernet.in	UG	CIVIL ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	INFORMATION TECHNOLOGY	60	60
				UG	MECHANICAL ENGINEERING	60	60
				PG	MECHANICAL ENGINEERING	15	15
				PG	ELECTRICAL ENGINEERING	15	15
2	102	KALYANI GOVERNMENT ENGINEERING COLLEGE	KALYANI UNIVERSITY CAMPUS KALYANI-741235, DIST. NADIA WEST BENGAL INDIA Tel: (033) 2582-6680 Telefax: (033) 2582-1309 E-mail: achintya_das@yahoo.co.in	UG	ELECTRICAL ENGINEERING	60	60
				UG	COMPUTER SCIENCE & ENGINEERING	60	60
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	60	60
				UG	INFORMATION TECHNOLOGY	60	60
				UG	MECHANICAL ENGINEERING	60	60
				PG	COMPUTER SCIENCE & ENGINEERING	18	18
				PG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	18	18

				PG	PRODUCTION ENGINEERING	18	18
				PG	ELECTRICAL ENGINEERING	18	18
				PG	INFORMATION TECHNOLOGY	18	18
				PG	MASTERS IN COMPUTER APPLICATIONS	40	40
3	103	<mark>HALDIA INSTITUTE OF TECHNOLOGY</mark>	ICARE COMPLEX; HIT CAMPUS, HALDIA, PURBA MEDINIPUR, WEST BENGAL, 721657 Tel: (03224) 252900 Telefax: (03224) 252800, 253062 E-mail: kgp-hit123@sancharnet.in	UG	APPLIED ELECTRONICS AND INSTRUMENTATION ENGINEERING	60	60
				UG	BIOTECHNOLOGY	60	60
				UG	CHEMICAL ENGINEERING	120	120
				UG	CIVIL ENGINEERING	120	120
				UG	COMPUTER SCIENCE AND ENGINEERING	180	180
				UG	ELECTRICAL ENGINEERING	120	120
				UG	ELECTRONICS & COMMUNICATION ENGG	180	180
				UG	FOOD TECHNOLOGY	60	60
				UG	INFORMATION TECHNOLOGY	60	**120**
				UG	MECHANICAL ENGINEERING	180	**120**
				UG	**COMPUTER SCIENCE AND ENGINEERING (CYBER SECURITY)**	00	**60**
				UG	**COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)**	00	**60**
				UG	**COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL**	00	**60**

					INTELLIGENCE AND MACHINE LEARNING)		
				PG	MECHANICAL ENGINEERING	18	18
				PG	CHEMICAL ENGINEERING	09	09
				PG	BIOTECHNOLOGY	09	09
				PG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	18	18
				PG	COMPUTER SCIENCE AND ENGINEERING	18	18
				PG	MBA	60	60
				PG	MASTERS IN COMPUTER APPLICATIONS	60	60
4	104	INSTITUTE OF ENGINEERING & MANAGEMENT	SALT LAKE ELECTRONICS COMPLEX, SECTOR-V, KOLKATA-700091 Tel: (033) 2357-2059/7649/8189/8908 Fax: (033) 2357-8320 E-mail: admin@iemcal.com	UG	COMPUTER SCIENCE AND ENGINEERING	180	180
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	180	180
				UG	INFORMATION TECHNOLOGY	120	**60**
				UG	ELECTRICAL ENGINEERING	120	**60**
				UG	MECHANICAL ENGINEERING	60	**30**
				UG	ELECTRICAL AND ELECTRONICS ENGINEERING	60	**30**
				UG	**COMPUTER SCIENCE AND BUSINESS SYSTEM**	00	**60**
				UG	**COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)**	00	**60**

				UG	**COMPUTER SCIENCE AND ENGINEERING (INTERNET OF THINGS AND CYBER SECURITY INCLUDING BLOCK CHAIN TECHNOLOGY)**	00	**60**
				PG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	18	18
				PG	COMPUTER SCIENCE AND ENGINEERING	18	18
				PG	**COMPUTER SCIENCE AND BUSINESS SYSTEM**	00	**18**
				PG	MBA	180	180
				PG	**MBA (GENERAL MANAGEMENT)**	00	**120**
5	105	<mark>BANKURA UNNAYANI INSTITUTE OF ENGINEERING</mark>	AT : POHABAGAN, BHAGABANDH, BANKURA, WEST BENGAL, 722146 Tel: (03242) 259360, 255955/855 Fax (03242) 255955 E-mail: bku_eng@sancharnet.in	UG	MECHANICAL ENGINEERING	60	60
				UG	INFORMATION TECHNOLOGY	30	30
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	CIVIL ENGINEERING	60	**30**
				UG	APPLIED ELECTRONICS AND INSTRUMENTATION ENGINEERING	30	30
				PG	COMPUTER SCIENCE & ENGINEERING	18	18

				PG	VLSI AND MICROELECTRONICS	18	18
				UG	SOFTWARE DEVELOPMENT (B.VOC)	25	25
				UG	GRAPHICS AND MULTIMEDIA (B.VOC)	25	25
6	106	MURSHIDABAD COLLEGE OF ENGINEERING & TECHNOLOGY	BANJETIA, BERHAMPORE, MURSHIDABAD, WEST BENGAL,742102 Telefax: (03482) 251191, 258145 E-mail: mcetbhb@sancharnet.in	UG	COMPUTER SCIENCE & ENGINEERING	60	60
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	30	**60**
				UG	CIVIL ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
7	107	COLLEGE OF ENGINEERING & MANAGEMENT, KOLAGHAT	P.O.:KTPP TOWNSHIP, DIST.: PURBA MEDINIPUR, PIN-721 171, WEST BENGAL Tel: (03228) 249443, 250600/971 Fax: (03228) 250880 E-mail: cemk_director@rediffmail.com/director@cemk.ac.in	UG	MECHANICAL ENGINEERING	60	60
				UG	INFORMATION TECHNOLOGY	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	120	120
				UG	APPLIED ELECTRONICS AND INSTRUMENTATION ENGINEERING	60	60
8	108	ASANSOL ENGINEERING COLLEGE	VIVEKANANDA SARANI KANYAPUR, ASANSOL, BARDHAMAN, WEST BENGAL 713305 Telefax: (0341) 2253057/2108 E-mail: dgp_aec@sancharne	UG	APPLIED ELECTRONICS AND INSTRUMENTATION ENGINEERING	60	**30**
				UG	CIVIL ENGINEERING	60	**30**
				UG	COMPUTER SCIENCE AND	120	**180**

			t.in			ENGINEERING		
				UG	ELECTRICAL ENGINEERING	120	120
				UG	ELECTRONICS AND COMMUNICATIO NS ENGINEERING	120	120
				UG	INFORMATION TECHNOLOGY	90	**120**
				UG	MECHANICAL ENGINEERING	120	**60**
				UG	**COMPUTER SCIENCE AND BUSINESS SYSTEM**	00	**30**
				PG	ELECTRONICS & COMMUNICATIO N ENGG	13	13
				PG	ELECTRICAL ENGINEERING	13	13
				PG	MASTERS IN COMPUTER APPLICATIONS	60	60
9	109	NETAJI SUBHASH ENGINEERING COLLEGE	TECHNO CITY, GARIA, KOLKATA-700152 Tel: (033) 2436-3333/1285 Fax: (033) 2436-1286 E-mail: principal_nsec@redi ffmail.com nsec@giascal01.vsnl. net.in	UG	COMPUTER SCIENCE AND ENGINEERING	120	**180**
				UG	CIVIL ENGINEERING	120	**60**
				UG	BIOMEDICAL ENGINEERING	30	**60**
				UG	APPLIED ELECTRONICS AND INSTRUMENTATI ON ENGINEERING	60	60
				UG	INFORMATION TECHNOLOGY	90	**120**
				UG	ELECTRONICS & COMMUNICATIO N ENGG	120	120
				UG	ELECTRICAL ENGINEERING	120	120
				UG	MECHANICAL ENGINEERING	120	**60**
				UG	**COMPUTER SCIENCE AND**	00	**30**

					BUSINESS SYSTEM		
				PG	COMPUTER SCIENCE AND ENGINEERING	18	18
				PG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	18	**09**
				PG	CONTROL AND INSTRUMENTATION	18	18
				PG	POWER SYSTEMS	36	**18**
				PG	MBA	30	30
				PG	**MBA (INNOVATION ENTREPRENEURSHIP AND VENTURE DEVELOPMENT)**	00	**30**
				UG	SOFTWARE DEVELOPMENT (B.VOC)	25	25
				UG	GRAPHICS AND MULTIMEDIA (B.VOC)	25	25
10	110	<mark>GOVT. COLLEGE OF ENGG. & TEXTILE TECHNOLOGY, SERAMPORE</mark>	12, WILLIAM CARRY ROAD, DIST. HOOGHLY, SERAMPORE, HOOGHLY, WEST BENGAL, 712201 Tel: (033) 2662-1058/3156 E-mail: ctts@giascl01.vsnl.net.in	UG	TEXTILE TECHNOLOGY	60	60
				UG	INFORMATION TECHNOLOGY	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	APPAREL AND PRODUCTION MANAGEMENT	60	60
				PG	CHEMICAL PROCESSING IN TEXTILES	10	10
				PG	TEXTILE TECHNOLOGY	10	10
11	111	<mark>GOVT. COLLEGE OF ENGINEERING AND TEXTILE TECHNOLOGY, BERHAMPORE</mark>	4, CANTONMENT ROAD, P.O.-BERHAMPORE, DIST-MURSHIDABAD, WEST BENGAL	UG	COMPUTER SCIENCE AND ENGINEERING	44	44
				UG	ELECTRICAL ENGINEERING	30	30

				UG	MECHANICAL ENGINEERING	30	30
			742101 Tel: (03482) 250142 Fax: (03482) 250809 E-mail: cttbcse@sancharnet.in	UG	TEXTILE TECHNOLOGY	60	60
				PG	TEXTILE ENGINEERING	18	18
12	112	GOVERNMENT COLLEGE OF ENGINEERING AND LEATHER TECHNOLOGY	BLOCK LB, SEC III, SALT LAKE, KOLKATA – 700098, NORTH 24 PARGANAS, WEST BENGAL Telefax: (033) 2335-6977 Fax: (033) 2200-2444 E-mail: clt@vsnl.net	UG	FOOTWEAR TECHNOLOGY	10	10
				UG	COMPUTER SCIENCE & ENGINEERING	60	60
				UG	INFORMATION TECHNOLOGY	40	40
				UG	LEATHER TECHNOLOGY	30	30
				PG	LEATHER TECHNOLOGY	25	**12**
13	113	GOVERNMENT COLLEGE OF ENGINEERING & CERAMIC TECHNOLOGY	73, ABINASH CHANDRA BANNERJEE LANE, KOLKATA – 700010, WEST BENGAL Telefax: (033) 2370-1264 Email: gcect@rediffmail.com	UG	CERAMIC ENGINEERING AND TECHNOLOGY	40	40
				UG	COMPUTER SCIENCE & ENGINEERING	40	40
				UG	INFORMATION TECHNOLOGY	40	40
				PG	INFORMATION TECHNOLOGY	18	18
				PG	CERAMIC ENGINEERING AND TECHNOLOGY	18	18
14	115	B.P. PODDAR INSTITUTE OF MANAGEMENT & TECHNOLOGY.	137, V.I.P. ROAD KOLKATA – 700 052. Tel: (033) 2573-9607/9608/9609/9610 Fax: (033) 2573-9401 E-mail: info@bppimt.ac.in	UG	COMPUTER SCIENCE AND ENGINEERING	120	120
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	120	120
				UG	INFORMATION TECHNOLOGY	60	60
				PG	MASTERS IN COMPUTER APPLICATIONS	40	40

15	116	MCKV INSTITUTE OF ENGINEERING	243, G.T. ROAD (NORTH), LILUAH, HOWRAH, WEST BENGAL 711204 Tel: (033) 2654-9315/9317 Fax: (033) 2654-9318 E-mail: mckvie@vsnl.net	UG	AUTOMOBILE ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	INFORMATION TECHNOLOGY	60	60
				UG	MECHANICAL ENGINEERING	60	60
				UG	**ELECTRONICS & COMMUNICATION (VLSI DESIGN)**	00	**60**
				UG	**COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)**	00	**60**
				PG	ELECTRONICS & COMMUNICATION ENGG	18	18
				PG	**MBA (BUSINESS ANALYTICS)**	00	**30**
16	117	RCC INSTITUTE OF INFORMATION TECHNOLOGY	CANAL SOUTH ROAD, BELIAGHATA, KOLKATA – 700 015 Tel: (033) 2216-1463/1400 Telefax: 2323-3356/3357 E-mail: campus@rcciit.in	UG	APPLIED ELECTRONICS AND INSTRUMENTATION ENGINEERING	54	**30**
				UG	COMPUTER SCIENCE AND ENGINEERING	108	**120**
				UG	ELECTRICAL ENGINEERING	54	**60**
				UG	ELECTRONICS & COMMUNICATION ENGG	108	**120**
				UG	INFORMATION TECHNOLOGY	108	**120**
				PG	COMPUTER SCIENCE & ENGINEERING	16	**18**
				PG	INFORMATION TECHNOLOGY	16	**18**

				PG	**MICRO ELECTRONICS & VLSI TECHNOLOGY**	16	**18**
				PG	MASTERS IN COMPUTER APPLICATIONS	54	**60**
17	118	BIRBHUM INSTITUTE OF ENGINEERING & TECHNOLOGY	P.O.-SURI, DIST. – BIRBHUM: PIN CODE – 731101 Tel: (03462) 255748/749, 256839 Fax: (03462) 258488 E-mail: ksh_dirbiet@sancharnet.in	UG	CIVIL ENGINEERING	120	120
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	MECHANICAL ENGINEERING	120	120
				PG	MANUFACTURING TECHNOLOGY	18	18
				PG	HEAT POWER ENGINEERING	18	18
18	119	SILIGURI INSTITUTE OF TECHNOLOGY	HILL CART ROAD, SUKNA, SILIGURI, DARJEELING, WEST BENGAL, 734009 Tel: (0353) 2571074/076/093, 2778004 Fax: (0353) 2778003 E-mail: sit99@rediffmail.com	UG	CIVIL ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	90	**120**
				UG	ELECTRICAL ENGINEERING	120	**90**
				UG	ELECTRONICS AND COMMUNICATION ENGINEERING	90	90
				UG	INFORMATION TECHNOLOGY	60	**120**
				PG	MBA	60	60
19	120	DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR	JEMUA ROAD, FULJHORE, DURGAPUR, 713206 Tel: (0343) 2501353/4106 Fax: (0343) 2503424, 2504059 Email: dgp_bcrec@sanchar	UG	**INSTRUMENTATION & ELECTRONICS**	60	60
				UG	CIVIL ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	120	120
				UG	ELECTRICAL	120	120

			net.in		ENGINEERING		
				UG	ELECTRONICS & COMMUNICATION ENGG	120	120
				UG	INFORMATION TECHNOLOGY	60	60
				UG	MECHANICAL ENGINEERING	120	120
				PG	**COMPUTER SCIENCE AND ENGINEERING**	18	18
				PG	MECHANICAL ENGINEERING	18	18
				PG	MODERN COMMUNICATION ENGINEERING	18	18
				PG	POWER SYSTEMS ENGINEERING	18	18
				PG	MBA	60	60
				PG	MASTERS IN COMPUTER APPLICATIONS	60	60
20	121	BENGAL INSTITUTE OF TECHNOLOGY	TECH TOWN, DHAPA MANPUR ON BASANTI HIGHWAY, PO-HADIA, KOLKATA-700150 Tel: (033) 2345-8001/8004 Fax: (033) 2345-8005 E-mail: info@bitcollege.org	UG	BIOTECHNOLOGY	30	30
				UG	COMPUTER SCIENCE AND ENGINEERING	120	120
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	60	**90**
				UG	INFORMATION TECHNOLOGY	60	60
21	122	ST. THOMAS' COLLEGE OF ENGINEERING & TECHNOLOGY	4, DIAMOND HARBOUR ROAD, KOLKATA, WEST BENGAL, PIN - 700023 Tel: (033) 2448-1081/82 Fax: (033) 2448-2914 E-mail: stcet@stcet.ac.in	UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	INFORMATION TECHNOLOGY	60	60
22	123	JIS COLLEGE OF ENGINEERING	BLOCK-A, PHASE – III, KALYANI, NADIA,	UG	BIO-MEDICAL ENGINEERING	60	**30**

			WEST BENGAL, 741235	UG	CIVIL ENGINEERING	120	**60**
			Tel: (033) 2582-2137/2856, 2582-8640	UG	COMPUTER SCIENCE AND ENGINEERING	120	**180**
			Fax: (033) 2580-8560 E-mail: tmp@jisgroup.org	UG	ELECTRICAL ENGINEERING	120	120
				UG	ELECTRONICS & COMMUNICATIO N ENGG	120	120
				UG	INFORMATION TECHNOLOGY	60	**90**
				UG	MECHANICAL ENGINEERING	120	**60**
				PG	MECHANICAL ENGINEERING	09	09
				PG	ELECTRICAL DEVICES AND POWER SYSTEMS	18	18
				PG	COMPUTER SCIENCE AND ENGINEERING	18	18
				PG	MOBILE COMMUNICATIO N AND NETWORK TECHNOLOGY	18	18
				UG	SOFTWARE DEVELOPMENT (B.VOC)	25	25
				UG	GRAPHICS AND MULTIMEDIA (B.VOC)	25	25
				PG	**MASTERS IN BUSINESS ADMINISTRATIO N**	00	**60**
23	124	<mark>GUPTA COLLEGE OF TECHNOLOGICAL SCIENCES</mark>	ASHRAM MORE G.T. ROAD ASANSOL-713301	UG	PHARMACY	100	100
			Tel: (0341) 2213120/2204423	PG	PHARMACOLOGY	15	15
			Telefax: (0341) 2214604 E-mail: trinitytrustasansol@ rediffmail.com	PG	PHARMACEUTICS	15	15

				UG	CIVIL ENGINEERING	60	60
24	125	BENGAL COLLEGE OF ENGINEERING & TECHNOLOGY	SAHID SUKUMAR BANERJEE SARANI BIDHAN NAGAR, DURGAPUR PIN- 713 212 DIST: BURDWAN WEST BENGAL Tel: (0343) 2533190/187, 2536756, 2532606 Telefax: (0343) 2533186 E-mail: skset_dgp@rediffmail.com	UG	COMPUTER SCIENCE AND ENGINEERING	180	180
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	120	120
				UG	INFORMATION TECHNOLOGY	120	120
				UG	MECHANICAL ENGINEERING	120	120
				PG	MBA	60	**30**
25	126	HERITAGE INSTITUTE OF TECHNOLOGY	994, MADURDAHA, CHOWBAGA ROAD, ANADAPUR P.O. EAST KOLKATA TOWNSHIP, KOLKATA SOUTH 24 PARGANAS, WEST BENGAL 700107 Tel: (033) 2443-0454/56/57/1255 - 58 Fax: (033) 2443-0455/1259 E-mail: admin@heritageit.edu	UG	APPLIED ELECTRONICS AND INSTRUMENTATION ENGINEERING	60	60
				UG	BIOTECHNOLOGY	60	60
				UG	CHEMICAL ENGINEERING	60	60
				UG	CIVIL ENGINEERING	120	120
				UG	COMPUTER SCIENCE AND ENGINEERING	180	180
				UG	MECHANICAL ENGINEERING	120	120
				UG	INFORMATION TECHNOLOGY	60	60
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	180	180
				UG	ELECTRICAL ENGINEERING	60	60
				UG	**BACHELOR OF DESIGN**	00	**30**
				UG	**COMPUTER SCIENCE AND BUSINESS SYSTEM**	00	**60**
				PG	VLSI	18	18

				PG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	18	18
				PG	BIOTECHNOLOGY	18	18
				PG	COMPUTER SCIENCE AND ENGINEERING	36	36
				PG	APPLIED ELECTRONICS AND INSTRUMENTATION ENGINEERING	18	18
				PG	RENEWABLE ENERGY	18	18
				PG	MASTER OF COMPUTER APPLICATIONS	60	60
26	127	NARULA INSTITUTE OF TECHNOLOGY	81, NILGUNJ ROAD, AGARPARA, KOLKATA-700109 Tel: (033) 2563-8888 Telefax: (033) 2583-7029/7777 E-mail: info@nit.ac.in	UG	CIVIL ENGINEERING	120	**60**
				UG	COMPUTER SCIENCE AND ENGINEERING	180	180
				UG	ELECTRICAL ENGINEERING	120	120
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	120	**150**
				UG	ELECTRONICS AND INSTRUMENTATION ENGINEERING	60	**30**
				UG	INFORMATION TECHNOLOGY	60	**120**
				UG	MECHANICAL ENGINEERING	60	60
				PG	COMPUTER SCIENCE AND ENGINEERING	18	18
				PG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	18	**12**
				PG	POWER SYSTEMS	18	**12**
				PG	STRUCTURAL	18	**30**

					ENGINEERING		
				PG	MASTERS IN COMPUTER APPLICATIONS	60	60
				UG	SOFTWARE DEVELOPMENT (B.VOC)	25	25
				UG	GRAPHICS AND MULTIMEDIA (B.VOC)	25	25
27	129	BHARTIYA VIDYA BHAVAN INSTITUTE OF MANAGEMENT SCIENCE	BLOCK-FA, SECTOR-III, SALT LAKE CITY Tel: (033) 2335-1250 Telefax: (033) 2335-8754	PG	MBA	120	120
28	130	TECHNO MAIN SALT LAKE (*FORMERLY TECHNO INDIA)*	EM-4/1, SECTOR-V, SALT LAKE, KOLKATA-700091 Tel: (033) 2357-5683/5685 Fax: (033) 2357-5686 E-mail: info@ticollege.org	UG	CIVIL ENGINEERING	120	120
				UG	COMPUTER SCIENCE & ENGINEERING	120	120
				UG	ELECTRICAL ENGINEERING	120	**180**
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	120	120
				UG	ELECTRONICS AND INSTRUMENTATION ENGINEERING	60	60
				UG	FOOD TECHNOLOGY	60	60
				UG	INFORMATION TECHNOLOGY	120	120
				UG	MECHANICAL ENGINEERING	120	120
				UG	**COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)**	00	**60**
				PG	FOOD TECHNOLOGY	18	18
				PG	VLSI AND	18	18

					MICROELECTRON ICS		
				PG	CIVIL ENGINEERING	18	18
				PG	ELECTRONICS AND COMMUNICATIO NS ENGINEERING	18	18
				PG	ELECTRICAL ENGINEERING	18	18
				PG	MBA	120	**120**
				PG	**MASTERS IN COMPUTER APPLICATIONS**	00	**60**
29	131	DUMKAL INSTITUTE OF ENGINEERING & TECHNOLOGY	VILLAGE BASANTAPUR PO BASANTAPUR PS DUMKAL DIST MURSHIDABAD PIN 742406 Tel: (03481) 231201/230033 Fax: (03481) 231188 E-mail: dietnet@hotmail.co m	UG	MECHANICAL ENGINEERING	30	**60**
				UG	ELECTRONICS AND COMMUNICATIO NS ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	30	**60**
				UG	COMPUTER SCIENCE & ENGINEERING	60	60
				UG	CIVIL ENGINEERING	30	**60**
				PG	ELECTRONICS AND COMMUNICATIO NS ENGINEERING	09	**18**
30	132	BHOLANANDA NATIONAL ACADEMY	VILLAGE: PANPUR, P.O. NARAYANPUR, KANKINARA, DISTRICT: 24 PARGANAS (N), WEST BENGAL, PIN – 743126.	UG	BBA	60	60
				UG	BCA	60	60
				UG	BBA (HOSPITAL MANAGEMENT)	30	30
31	133	GEORGE COLLEGE	136 B. B. GANGULY STREET, KOLKATA – 700012 Tel: (033) 2217-6142 Telefax: (033) 2217-6143 E-mail: enquiry@georgecoll	UG	BBA	90	90
				UG	BCA	90	90
				UG	BBA (HOSPITAL MANAGEMENT)	90	90
				UG	BTTM	60	60
				UG	B.SC. IN MEDIA SCIENCE	60	60
				UG	BBA (SPORTS	60	60

			ege.org	UG	MANAGEMENT)	00	**60**
				UG	B.SC. IN MULTIMEDIA,	50	50
				UG	ANIMATION &	50	50
				UG	GRAPHICS	50	50
				UG	**BBA (ACCOUNTANCY,**	50	50
				UG	**TAXATION & AUDITING)**	50	50
				UG	BEAUTY AND AESTHETICS (B.VOC)	50	50
				UG	MEDICAL LAB TECHNOLOGY (B.VOC) AUTOMOBILE SERVICING TECHNOLOGY (B.VOC) HARDWARE NETWORKING (B.VOC) BANKING FINANCE SERVICE AND INSURANCE (B.VOC) ELECTRONICS MANUFACTURIN G SERVICES (B.VOC) INTERIOR DESIGN (B.VOC)	50	50
32	134	<mark>GITARAM INSTITUTE OF MANAGEMENT</mark>	BERHAMPORE, MURSHIDABAD Telefax: (03482) 226440, 9002805538/947568 1137 E-mail: gitaram.institute200 0@gmail.com	UG UG UG	BBA BCA BBA (HOSPITAL MANAGEMENT)	40 60 60	40 60 60
33	136	<mark>ARMY INSTITUTE OF MANAGEMENT</mark>	JUDGES COURT ROAD OPPOSITE ALIPORE TELEPHONE EXCHANGE ALIPORE KOLKATA-700027 Tel: (033) 2479-	PG	MBA	120	120

			4494, 2439-8335/37/38 Telefax: (033) 2479-4929 E-mail: aim_kol@rediffmail.com				
34	137	INSTITUTE OF BUSINESS MANAGEMENT & RESEARCH	318A, PRANTIK PALLY, RAJDANGA, KOLKATA – 700107.	PG	MBA	30	30
35	139	VIDYASAGAR COLLEGE OF OPTOMETRY & VISION SCIENCE	220, HOSSENPUR, (E.M. BY PASS NEAR KALIKAPUR BRIDGE), KOL - 700107 Tel: (033) 2441-4412 Telefax: (033) 2441-2542 E-mail: vcovs_inf@hotmail.com	UG PG	B.OPTOM (BACHELOR OF OPTOMETRY) MASTER OF OPTOMETRY (MOPTOM)	60 20	60 20
36	142	MEGHNAD SAHA INSTITUTE OF TECHNOLOGY	TECHNO COMPLEX, MADURDAHA, BESIDE NRI COMPLEX, UCHHEPOTA, KOLKATA-700150 Tel: (033) 2443-1031 Fax: (033) 2443-1032 E-mail: msit_engg@hotmail.com	UG	MECHANICAL ENGINEERING	60	60
				UG	INFORMATION TECHNOLOGY	60	60
				UG	CIVIL ENGINEERING	120	120
				UG	COMPUTER SCIENCE AND ENGINEERING	60	**120**
				UG	ELECTRICAL ENGINEERING	120	**60**
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	60	60
				UG	**COMPUTER SCIENCE AND BUSINESS SYSTEM**	00	**30**
				PG	COMPUTER SCIENCE AND ENGINEERING	09	09
				PG	GEOTECHNICAL ENGINEERING	18	18
				PG	ELECTRONICS &	18	**09**

					COMMUNICATION ENGG		
				PG	MBA	60	60
				PG	**MBA (INNOVATION ENTREPRENEURSHIP AND VENTURE DEVELOPMENT)**	00	**30**
				PG	MASTERS IN COMPUTER APPLICATIONS	60	**30**
37	143	<mark>GURUNANAK INSTITUTE OF TECHNOLOGY</mark>	157/F, NILGUNJ ROAD, PANIHATI, SODEPUR, KOLKATA-700114 Tel: (033) 2563-7929 Telefax: (033) 2563-7957 E-mail: info@jisgroup.ac.in	UG	ELECTRONICS & COMMUNICATION ENGG	120	120
				UG	ELECTRICAL ENGINEERING	120	**60**
				UG	COMPUTER SCIENCE AND ENGINEERING	120	**180**
				UG	APPLIED ELECTRONICS AND INSTRUMENTATION ENGINEERING	60	**30**
				UG	FOOD TECHNOLOGY	60	60
				UG	INFORMATION TECHNOLOGY	60	**90**
				PG	MOBILE COMMUNICATION AND NETWORK TECHNOLOGY	09	09
				PG	COMPUTER SCIENCE AND ENGINEERING	09	09
				PG	MASTERS IN COMPUTER APPLICATIONS	60	**30**
				UG	SOFTWARE DEVELOPMENT (B.VOC)	25	25
				UG	GRAPHICS AND MULTIMEDIA (B.VOC)	25	25
38	144	<mark>NEOTIA</mark>	DIAMOND HARBOUR	UG	COMPUTER	60	60

		INSTITUTE OF TECHNOLOGY, MANAGEMENT AND SCIENCE	ROAD P.O.: AMIRA SOUTH 24 PARGANAS WEST BENGAL PIN-743368 Tel: (03174) 245078/101/354 E-mail: info@itmeindia.org		SCIENCE AND ENGINEERING		
				UG	ELECTRONICS & COMMUNICATION ENGG	60	60
39	145	TECHNO INDIA INSTITUTE OF TECHNOLOGY	MOUZA – DHAPA, MANPUR, J.L. NO. 1, WARD NO. 108, KOLKATA E-mail: info@technoindiagroup.com		1ST SHIFT		
				UG	BBA	60	60
				UG	BCA	60	60
				UG	BBA (HOSPITAL MANAGEMENT)	60	60
				UG	2ND SHIFT	00	**60**
				UG	**BBA**	00	**60**
					BCA		
40	148	FUTURE INSTITUTE OF ENGINEERING AND MANAGEMENT	SONARPUR STATION ROAD.,DIST.-SOUTH 24 PRGS., KOLKATA 700150 Tel: (033) 2434-5615/5640 Fax: (033) 2434-5641 E-mail: director@fiemonline.org / official@fiemonline.org	UG	**COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)**	00	**60**
				UG	COMPUTER SCIENCE AND ENGINEERING	120	120
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	120	120
				UG	INFORMATION TECHNOLOGY	60	60
				UG	MECHANICAL ENGINEERING	60	60
				PG	MBA	60	60
				PG	MASTERS IN COMPUTER APPLICATIONS	60	60
41	149	NSHM COLLEGE OF MANAGEMENT & TECHNOLOGY	ARRAH SHIVTALA, VIA MUCHIPARA, DURGAPUR, DIST. BURDWAN, WEST BENGAL, PIN – 713212 Tel: (0343) 2533813/814/815, 2561045 Email:		1ST SHIFT		
				UG	BCA	60	60
				UG	B.OPTOM	120	120
				UG	(BACHELOR OF	120	120
				UG	OPTOMETRY)	120	120
				UG	BBA (HOSPITAL	60	60
				UG	MANAGEMENT)	60	**120**
					BBA		
				UG	BTTM	60	60
				UG	B.SC IN	30	30

			info@nshm.com	UG	HOSPITALITY AND HOTEL ADMINISTRATION	60	**30**
				UG		60	60
				PG		30	30
				PG	BBA (SPORTS MANAGEMENT)	30	30
				PG	B.SC (BEHAVIOURAL SCIENCE & APPLIED PSYCHOLOGY)	30	30
				PG		30	30
				PG		30	30
				PG	B.SC. (CULINARY SCIENCE)	30	30
				PG		30	30
				UG	B.SC. (MEDICAL LAB TECHNOLOGY)	60	**30**
					M.SC. (DIETETICS AND NUTRITION)		
					M.SC. (CLINICAL PSYCHOLOGY)		
					M.SC. (HOSPITALITY MANAGEMENT)		
					MASTER OF TOURISM & TRAVEL MANAGEMENT (MTTM)		
					MHA (MASTER OF HOSPITAL ADMINISTRATION)		
					M.SC. IN COMPUTER SCIENCE		
					M.PHIL		
					2ND SHIFT B.SC. (YOGA)		
42	150	<mark>NOPANY INSTITUTE OF MANAGEMENT STUDIES</mark>	2-D, NANDO MULLICK LANE, KOLKATA – 700 006 Tel: (033) 2533-8503, 3259-0283 Fax: (033) 2543-7168 Email: director@nopanyinstituteofmanagements	UG	BCA	60	**25**
				UG	BBA	60	60
				UG	BBA (HOSPITAL MANAGEMENT)	60	60

			tudies.com				
43	152	TECHNO INDIA (HOOGHLY CAMPUS)	DHARAMPUR SANTINIKATAN, HOOGHLY–712 101 Tel: (033) 2680-2389/4753 E-mail: info@ticollege-hooghly.org	UG UG PG UG UG	1ST SHIFT BBA BCA **M.SC. IN COMPUTER SCIENCE** 2ND SHIFT **BBA BCA**	120 120 00 00 00	120 120 **60** **60** **60**
44	153	SYAMAPRASAD INST. OF TECH. & MANAGEMENT	7 RAJA RAMMOHON ROY ROAD, TOLLYGUNGE SIRITI MORE, KOLKATA 700041 Tel: (033) 2455-2289 Telefax: (033) 2454-2289, 2485-5905 Email: spinst@dataone.in	UG	BCA	60	60
45	154	DINABANDHU ANDREWS INSTITUTE OF TECHNOLOGY & MANAGEMENT	1/406A, BLOCK-S, BAISHNABGHATA PATULI TOWNSHIP, KOLKATA – 700 094. Tel: (033) 2430-4876/4878 Fax: (033) 2430-1762 E-mail: daitm@vsnl.net.in	UG UG UG UG PG PG	BCA BBA BBA (HOSPITAL MANAGEMENT) **B.SC. (MEDICAL LAB TECHNOLOGY)** M.SC. IN COMPUTER SCIENCE M.SC. IN APPLIED MATHEMATICS	90 90 90 00 30 15	90 90 90 **30** 30 15
46	155	DURGAPUR INSTITUTE OF ADVANCED TECHNOLOGY & MANAGEMENT	G.T. ROAD, RAJBANDH, DURGAPUR-713212, DIST. BURDWAN WEST BENGAL Tel: (0343) 2520712/713 Fax: (0343) 2520881 E-mail: diatm@rahul.ac.in	UG	MECHANICAL ENGINEERING	120	**30**
				UG	ELECTRONICS & COMMUNICATION ENGG	90	**30**
				UG	ELECTRICAL ENGINEERING	120	**30**
				UG	COMPUTER SCIENCE AND ENGINEERING	90	90
				PG	ELECTRONICS & COMMUNICATION ENGG	09	09
47	156	PAILAN COLLEGE	BENGAL PAILAN	UG	ELECTRONICS	60	60

		OF MANAGEMENT & TECHNOLOGY [B.TECH DIVISION]	PARK, SECTOR – 1 PHASE - I JOKA, (OFF DIAMOND HARBOUR ROAD), KOLKATA-700 104 Tel: (033) 24978006/007, 2453-5605 Fax: (033) 2453-5604 E-mail: pcmt@pcmt-india.net		AND COMMUNICATIONS ENGINEERING		
				UG	ELECTRICAL & ELECTRONICS ENGINEERING	60	**30**
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	CIVIL ENGINEERING	60	60
48	158	MALLABHUM INSTITUTE OF TECHNOLOGY	CAMPUS: BRAJA-RADHANAGAR P.O.-GOSAINPUR, P.S. BISHNUPUR. DIST.-BANKURA, PIN-722122 Tel: (03244) 255207/208 Telefax: (03244) 255206 E-mail: mallaengedu@vsnl.net	UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	CIVIL ENGINEERING	60	60
				UG	MECHANICAL ENGINEERING	120	120
49	159	CALCUTTA INSTITUTE OF PHARMACEUTICAL TECHNOLOGY & ALLIED HEALTH SCIENCES	BANITABLA, ULUBERIA, HOWRAH-711316 Tel: (033) 2661-2094/96/97 Fax: (033) 2661-3733 E-mail: cipt@rediffmail.com	UG	PHARMACY	100	100
				PG	PHARMACOLOGY	10	**06**
				PG	PHARMACEUTICS	10	**09**
				PG	PHARMACEUTICAL BIOTECHNOLOGY	15	**06**
50	160	NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING & RESEARCH, KOLKATA	BLOCK-FC, SECTOR-I1I, SALT LAKE Tel: (033) 2337-0937/0479/4125 Fax: (033) 2337-6331/6290 E-mail: director_nitttr_kol@yahoo.com	PG	MANUFACTURING TECHNOLOGY	28	28
				PG	MECHATRONICS	28	28
				PG	MULTIMEDIA AND SOFTWARE ENGINEERING	28	28
				PG	STRUCTURAL ENGINEERING	09	09
51	161	PARAMEDICAL COLLEGE, DURGAPUR	HELLEN KELLER SARANI, BIDHANNAGAR, DGP– 713212	UG UG UG UG	B.OPTOM (BACHELOR OF OPTOMETRY) BBA (HOSPITAL	60 60 60 60	60 60 60 60

			Tel: (0343) 2532154 E-mail: ipmtst@dataone.in	UG PG	MANAGEMENT) B.SC. IN MICROBIOLOGY B.SC. IN BIOTECHNOLOGY B.SC. (MEDICAL LAB TECHNOLOGY) M.SC. (DIETETICS & NUTRITION)	60 20	60 20
52	163	BENGAL INSTITUTE OF TECHNOLOGY AND MANAGEMENT	SRINIKETAN BYPASS P.O.-DORANDA DIST-BIRBHUM WEST BENGAL PIN-731236. Tel: (03463) 271353/4 Telefax: (03463) 271371 E-mail: bitm@vsnl.net	UG	CIVIL ENGINEERING	120	120
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	60	60
				UG	INFORMATION TECHNOLOGY	60	60
				UG	MECHANICAL ENGINEERING	180	180
				PG	COMPUTER SCIENCE AND ENGINEERING	18	18
				PG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	18	18
				PG	ELECTRICAL ENGINEERING	18	18
				PG	MBA	60	60
53	164	GEORGE COLLEGE OF MANAGEMENT AND SCIENCE	BUDGE BUDGE TRUNK ROAD CHALKMIR, MAHESHTALA, KOLKATA – 700 141 Tel: (033) 2401-2289 Telefax: (033) 24018687 E-mail: enquiry@georgecollege.org	UG UG UG UG PG	BBA BCA B.OPTOM (BACHELOR OF OPTOMETRY) BBA (HOSPITAL MANAGEMENT) MASTER OF OPTOMETRY (MOPTOM)	90 60 90 90 30	90 60 90 90 30

54	165	CALCUTTA INSTITUTE OF ENGINEERING AND MANAGEMENT	PRASANTA SUR CAMPUS, 24/1A CHANDI GHOSH ROAD, KOLKATA, SOUTH 24 PARGANAS, WEST BENGAL, 700040 Tel: (033) 2421-8998/5747 Telefax: (033) 2421-9951 E-mail: admin@ciemcal.orgc	UG	ELECTRICAL ENGINEERING	120	**60**
				UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	INFORMATION TECHNOLOGY	60	60
				UG	COMPUTER SCIENCE & ENGINEERING	60	60
				UG	CIVIL ENGINEERING	60	60
				PG	MBA	60	60
55	168	SAROJ MOHAN INSTITUTE OF TECHNOLOGY	BADHAGACHI, GUPTIPARA HOOGHLY PIN-712512 Tel: (03213) 262499/856 Telefax: (03213) 262201 E-mail: office@smitguptipara.com	UG	MECHANICAL ENGINEERING	60	60
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	60	**30**
				UG	ELECTRICAL ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	90	90
				UG	CIVIL ENGINEERING	60	**30**
				PG	MBA	30	30
56	169	ACADEMY OF TECHNOLOGY	G.T. ROAD, ADISAPTAGRAM P.O: AEDCONAGAR DIST-HOOGHLY WEST BENGAL 712121 Telefax: (033) 2684-2888 E-mail: academy@aot.edu.in Contact No. 9830161441	UG	COMPUTER SCIENCE AND ENGINEERING	120	**180**
				UG	ELECTRICAL ENGINEERING	120	**60**
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	120	**180**
				UG	MECHANICAL ENGINEERING	120	**60**
				UG	**COMPUTER SCIENCE AND BUSINESS SYSTEM**	00	**60**
				UG	**ELECTRICAL AND ELECTRONICS ENGINEERING**	00	**60**
				PG	MBA (GENERAL	00	**60**

					MANAGEMENT)		
57	170	IMPS COLLEGE OF ENGINEERING & TECHNOLOGY	VILL-NITYANANDAPUR P.O.-CHANDIPUR(KAZIGRAM) DIST-MALDA PIN-732103 WEST BENGAL Tel: (03512) 271555/251272 Telefax: (03512) 278115 E-mail: impscet@sancharnet.in	UG	CIVIL ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	30	30
				UG	ELECTRONICS & COMMUNICATION ENGG	30	30
				UG	ELECTRICAL ENGINEERING	30	30
58	173	KINGSTON SCHOOL OF MANAGEMENT AND SCIENCE	BERUNAN PUKURIA, P.O. MALLIKEPUR, BARASAT Tel: (033) 2538-9508, 2542-9800 Telefax: (033) 2538-9509 E-mail: kingston_educational_institute@yahoo.com	UG UG UG UG	BBA BCA BBA (HOSPITAL MANAGEMENT) B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION	60 60 120 60	60 60 120 60
59	174	NETAJI SUBHAS CHANDRA BOSE INSTITUTE OF PHARMACY	TATLA, ROYPARA P.O. CHAKDAHA DIST. NADIA WEST BENGAL - 741222 Tel: (03473) 285448 Fax: (03473) 240198 E-mail: nscbip2004@yahoo.co.in	UG	PHARMACY	100	100
				PG	PHARMACEUTICAL CHEMISTRY	06	06
				PG	PHARMACEUTICS	09	**06**
				PG	PHARMACOLOGY	09	**06**
60	175	HALDIA INSTITUTE OF MANAGEMENT	P.O. HATIBERIA, PIN – 721 657 Tel: (03224) 255843 Telefax: (03224) 255275 E-mail: icare_haldia@rediffmail.com	UG UG UG UG UG UG PG PG	BBA (HOSPITAL MANAGEMENT) BBA B.OPTOM (BACHELOR OF OPTOMETRY) B.SC. IN GAMING & MOBILE APPLICATION DEVELOPMENT **BBA (SUPPLY**	60 60 30 60 00 00 36 00	60 60 30 60 **60** **60** 36 **30**

					CHAIN MANAGEMENT) B.SC. IN DATA SCIENCE MHA (MASTER OF HOSPITAL ADMINISTRATION) **MASTER OF PUBLIC HEALTH**		
61	176	HOOGHLY ENGINEERING & TECHNOLOGY COLLEGE	VIVEKANANDA ROAD, PIPULPATI, P.S.: CHINSURAH, P.O. & DIST: HOOGHLY, PIN: 712103, WEST BENGAL Tel: (033) 2681-1392/0505 Telefax: (033) 2680-3026 E-mail: mail@hetc.ac.in	UG	MECHANICAL ENGINEERING	60	**30**
				UG	ELECTRONICS & TELE-COMMUNICATION ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	60	**90**
				UG	CIVIL ENGINEERING	60	60
62	177	CALCUTTA INSTITUTE OF TECHNOLOGY	BANITABLA, ULUBERIA, HOWRAH-711316 Telefax: (033) 2661-0499 E-mail: cit_ulb@yahoo.co.in	UG	CHEMICAL ENGINEERING	60	60
				UG	CIVIL ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	**30**
				UG	ELECTRONICS & COMMUNICATION ENGG	30	30
				UG	MECHANICAL ENGINEERING	60	**30**
				PG	CHEMICAL ENGINEERING	09	09
				PG	MASTERS IN COMPUTER APPLICATIONS	60	60
63	178	INTERNATIONAL INSTITUTE OF MANAGEMENT SCIENCES	NH-6, BOMBAY ROAD, (OPP.: BISK PHARM), PALARA, PO-	PG	MBA	60	60

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			MAHISHREKHA,ULU BERIA, HOWRAH,PIN-711303, WEST BENGAL Tel: (033) 2337-2592/ 9163302203 Fax: (033) 2334-9183 E-mail: cal_iims@sify.com				
64	179	HALDIA INSTITUTE OF MARITIME STUDIES & RESEARCH	MARINE CAMPUS, ICARE COMPLEX, HATIBERIA, HALDIA, WEST BENGAL – 721 657 Tel: (03224) 267501/502 Fax: (03224) 252800, 255275 E-mail: iimsar@sancharnet.in	UG UG UG UG	B.SC. IN NAUTICAL SCIENCE **BBA (INSURANCE & RISK MANAGEMENT)** **B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION** **B.SC. (CULINARY SCIENCE)**	80 00 00 00	80 **60** **60** **60**
65	180	NIPS SCHOOL OF HOTEL MANAGEMENT	297, MAHISBATHAN, SECTOR V, SALT LAKE CITY, KOLKATA – 700 102 Tel: (033) 2334-3079, 2367-5127/28 Fax: (033) 2367-5177 E-mail: nipscal@vsnl.com	UG UG PG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION B.SC. (CULINARY SCIENCE) M.SC. (HOSPITALITY MANAGEMENT)	120 60 30	120 60 30
66	182	INSTITUTE OF SCIENCE AND TECHNOLOGY	DHURABILA, DHAMKURIA, CHANDRAKONA TOWN, PASCHIM MEDNIPUR, WEST BENGAL, 721201. Tel: (03225) 267288 Telefax: (03225) 266644 E-mail: pradip_dgp6@indiatimes.com	UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRICAL AND ELECTRONICS ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	CIVIL ENGINEERING	120	120

				UG	APPLIED ELECTRONICS AND INSTRUMENTATION ENGINEERING	60	60
				UG	INFORMATION TECHNOLOGY	60	60
				UG	MECHANICAL ENGINEERING	60	60
				PG	CIVIL ENGINEERING	18	18
				PG	COMPUTER SCIENCE AND ENGINEERING	18	18
				PG	ELECTRONICS & COMMUNICATION ENGG	18	18
				PG	MECHANICAL ENGINEERING DESIGN	18	18
				PG	ELECTRICAL MACHINES AND DRIVES	18	18
				PG	MASTERS IN COMPUTER APPLICATIONS	60	60
67	183	<mark>EASTERN INSTITUTE FOR INTEGRATED LEARNING IN MANAGEMENT</mark>	6 WATERLOO STREET, 2ND FLOOR, KOLKATA – 700 069 Tel: (033) 2210-0911 Fax: (033) 2210-0909 E-mail: eiilm@vsnl.com	UG	BBA	60	60
68	185	<mark>GURUNANAK INSTITUTE OF HOTEL MANAGEMENT</mark>	157/F NILGUNJ ROAD, KOLKATA, NORTH 24 PARGANAS, WEST BENGAL, 700114 Telefax: + 91 33 2523-1246	UG	HOTEL MANAGEMENT AND CATERING TECHNOLOGY	60	60
69	186	<mark>GURU NANAK INSTITUTE OF PHARMACEUTICAL SCIENCE & TECHNOLOGY</mark>	157/F, NILGUNJ ROAD, KOLKATA - 700114 Ph. 91 33 2523-1247 Email: info@gnipst.ac.in	UG	PHARMACY	100	100
				PG	PHARMACEUTICAL CHEMISTRY	09	**12**
				PG	PHARMACOLOGY	18	**15**
				PG	PHARMACEUTICS	18	**15**
				PG	**PHARMACEUTIC**	00	**09**

					AL QUALITY ASSURANCE		
				PG	**REGULATORY AFFAIRS**	00	**09**
70	187	TECHNO INTERNATIONAL NEW TOWN	MEGA CITY, NEW TOWN, KOLKATA, WEST BENGAL, 700156 Tel: (033) 27062050 Telefax: (033) 27062060 E-mail: info@ticollege.org	UG	ELECTRICAL ENGINEERING	120	120
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	120	120
				UG	APPLIED ELECTRONICS AND INSTRUMENTATION ENGINEERING	60	60
				UG	CIVIL ENGINEERING	120	**60**
				UG	COMPUTER SCIENCE AND ENGINEERING	120	**180**
				UG	INFORMATION TECHNOLOGY	60	**120**
				UG	MECHANICAL ENGINEERING	120	**60**
				UG	**COMPUTER SCIENCE AND BUSINESS SYSTEM**	00	**30**
				PG	ELECTRICAL ENGINEERING	09	09
				PG	MASTERS IN COMPUTER APPLICATIONS	60	60
71	188	TECHNO COLLEGE HOOGHLY (*FORMERLY TECHNO INDIA-HOOGHLY*)	DHARAMPUR, SHANTINIKETAN ON G T ROAD, CHINSURAH, HOOGHLY Tel: (033) 2680-6565 Telefax: (033) 2680-2389 E-mail: info@ticollege-hooghly.org	PG	MASTERS IN COMPUTER APPLICATIONS	60	60
72	189	DR. B. C. ROY COLLEGE OF	DR. MEGHNAD SAHA SARANI,	UG	PHARMACY	100	100
				PG	PHARMACEUTICS	18	**15**

		PHARMACY AND ALLIED HEALTH SCIENCES	BIDHANNAGAR, DURGAPUR, WEST BENGAL, PIN-713206 Tel: (0343) 2532678, 6521683 Telefax: (0343) 2532679 E-mail: bcrcp_dgp@yahoo.co.in	PG	PHARMACOLOGY	18	**15**
73	192	GLOBAL INSTITUTE OF SCIENCE & TECHNOLOGY	HALDIA, PURBA MEDINIPUR Tel: (03224) 263587 Telefax: (03224) 263091 E-mail: gist@icare-haldia.org	UG	BCA	60	60
74	193	BENGAL SCHOOL OF TECHNOLOGY	SUGANDHA, DELHI ROAD NEAR CHINSURAH RLY. STATION, HOOGHLY, PIN-712102 Tel: (033) 2686-6064/2027 Fax: (033) 2686-2482 E-mail: bstpharmacy@rediffmail.com	UG	PHARMACY	90	**100**
				PG	PHARMACOLOGY	16	**12**
				PG	PHARMACEUTICS	16	**15**
75	194	INSTITUTE OF MANAGEMENT STUDY	93 MUKUNDAPUR MAIN ROAD, KOLKATA – 700 099 Tel: (033) 2426-4168 Fax: (033) 2466-4579 E-mail: imscal@vsnl.net		1ST SHIFT		
				UG	BBA	60	60
				UG	BCA	60	60
				UG	BBA (HOSPITAL MANAGEMENT)	60	60
				UG		30	30
				PG	BTTM	60	60
				UG	MHA (MASTER OF HOSPITAL ADMINISTRATION)	60	60
				UG		00	**60**
				UG		00	**60**
				UG	B.OPTOM (BACEHELOR OF OPTOMETRY)	00	**60**
				PG	**B.SC. (MEDICAL LAB TECHNOLOGY)**	30	30
				PG		30	30
				PG	**B.SC. (PHYSIOTHERAPY MANAGEMENT**	30	30
				PG		60	60

				PG	**& HEALTHCARE SCIENCE)**	30	30
				PG	**BBA**	30	30
				PG	**(ACCOUNTANCY,**	30	30
				UG	**TAXATION &**	30	30
				UG	**AUDITING)**	60	60
					MASTER OF OPTOMETRY		
				PG	(MOPTOM)	30	30
				PG	M.PHIL	30	30
					2ND SHIFT		
					M.SC. IN COMPUTER SCIENCE		
					MASTER OF PUBLIC HEALTH		
					MASTER OF TOURISM & TRAVEL MANAGEMENT (MTTM)		
					M.SC. IN DATA ANALYTICS		
					M.SC. IN MEDIA SCIENCE		
					B.SC. IN MEDIA SCIENCE		
					B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION		
					M.SC. (HOSPITALITY MANAGEMENT)		
					M.SC. (DIETETICS & NUTRITION)		
76	195	THE CALCUTTA ANGLO GUJARATI COLLEGE	29 POLLOCK STREET, KOLKATA – 700 001 Tel: (033) 2235-1585 Fax: (033) 2211-4247 E-mail: cagcollege@rediffmail.com	UG UG	BBA BCA	60 60	60 60
77	198	ADVANCED INFORMATION & MANAGEMENT	Z.P. AVENUE, SAGARBHANGA, ZONAL CENTRE,	UG UG	B.SC. IN HOSPITALITY AND HOTEL	60 60	60 60

		<mark>STUDIES</mark>	DURGAPUR, DIST: BURDWAN, PIN – 713211, W.B. Ph. 0343-2559126/27 E-mail: response@aimssyndicate.org	UG UG UG	ADMINISTRATION BTTM BBA BCA BBA (HOSPITAL MANAGEMENT)	30 30 60	30 30 60
78	199	<mark>DOOARS ACADEMY OF TECHNOLOGY AND MANAGEMENT</mark>	NEW ALIPURDUAR STATION ROAD, ALIPURDUAR, PIN – 736121 Tel: (03564) 257955	UG UG UG UG PG UG UG UG PG PG	1ST SHIFT BBA BCA **B.SC. (MEDICAL LAB TECHNOLOGY) B.OPTOM (BACHELOR OF OPTOMETRY)** M.SC IN COMPUTER SCIENCE 2ND SHIFT **BBA (HOSPITAL MANAGEMENT) B.SC. IN MEDIA SCIENCE B.SC. IN HOSPITALITY & HOTEL ADMINISTRATION M.SC. (CLINICAL PSYCHOLOGY) M.SC. (DIETETICS & NUTRITION)**	60 60 00 00 30 00 00 00 00 00	60 60 **60 60** 30 **60 60 60 30 30**
79	200	<mark>GOLDEN REGENCY INSTITUTE OF HOSPITALITY MANAGEMENT</mark>	DEBHOG, CITY CENTRE, HALDIA – 721 657, MIDNAPORE (EAST) Tel: (03224) 252020/252688, 9831780919 Fax: (03224) 252622cera E-mail: golden_regency@yahoo.com	UG UG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION BBA	60 60	60 60
80	201	<mark>BCDA COLLEGE OF PHARMACY &</mark>	78 JESSORE ROAD(S), HRIDAYPUR,	UG	PHARMACY	100	100

		TECHNOLOGY	BARASAT 24 PGS(N), KOLKATA-700127 Tel: (033) 2584-2665 Fax: (033) 2584-2433 E-mail: principal_bcda@yahoo.co.in				
81	202	KOTIBARSHA INSTITUTE OF TECHNOLOGY AND MANAGEMENT	KITM CAMPUS, VILL – PANJARIPARA, P.O. SUDARSHAN NAGAR, BUNIADPUR, DIST - DAKSHIN DINAJPUR, WEST BENGAL, PIN – 733 121 Tel: 9474440213 Telefax: (03524) 259055 E-mail: helpdesk@kitmdd.com	UG UG UG UG	BBA BCA B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION BBA (HOSPITAL MANAGEMENT)	60 60 45 30	60 60 45 30
82	206	SEACOM ENGINEERING COLLEGE	JALADHULAGORI SANKRAIL PO: ANDUL MOURI HOWRAH-711302 Tel: (033) 2679-0481/82/83 Fax: (033) 2679-0480 E-mail: seacomengineering @rediffmail.com	UG	CIVIL ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	90	90
				UG	INFORMATION TECHNOLOGY	60	60
				UG	MARINE ENGINEERING	30	30
				UG	MECHANICAL ENGINEERING	90	90
				PG	MBA	60	60
				PG	MASTERS IN COMPUTER APPLICATIONS	30	30
83	208	BHARAT TECHNOLOGY	JADURBERIA, BANITABLA, ULUBERIA, PIN-711316 Tel: (033) 2709-4430 Fax: (033) 2661-0736	UG	PHARMACY	100	100

			E-mail: anjali_hect@rediffmail.com				
84	209	DREAM INSTITUTE OF TECHNOLOGY	P.O. NAHAZARI, P.S.: BISHNUPUR, 24 PARGANAS (SOUTH), KOLKATA 700104 Tel: (033) 3093-6088 Fax: (033) 2398-0244 E-mail: dream_institute_of_technology@hotmail.com	UG	CIVIL ENGINEERING	60	**30**
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	120	**60**
				UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	MECHANICAL ENGINEERING	60	**30**
				PG	POWER ELECTRONICS AND DRIVES	18	18
				PG	MICROELECTRONICS & VLSI DESIGN	18	18
85	210	INSTITUTE OF GENETIC ENGINEERING	30 THAKURHAT ROAD, BADU, KOLKATA – 700 128 Tel: (033) 2526-0052/53 Telefax: (033) 2526-0060 E-mail: igebadu04@yahoo.com.au	PG PG UG UG UG UG UG PG UG UG	M.SC. IN GENETICS M.SC. IN BIOTECHNOLOGY B.SC. IN BIOTECHNOLOGY B.SC. IN MICROBIOLOGY B.SC. IN GENETICS B.SC. IN MOLECULAR BIOLOGY BCA M.SC. IN MICROBIOLOGY B.SC. (MEDICAL LAB TECHNOLOGY) BBA	20 30 60 30 30 30 30 20 60 30	20 30 60 30 30 30 30 20 60 30
86	211	POST GRADUATE INSTITUTE OF HOSPITAL ADMINISTRATION	360 PANCHASAYAR, KOLKATA – 700 094 Tel: (033) 2462-0071/72/73/2394 Fax: (033) 2462-0766	UG PG	BBA (HOSPITAL MANAGEMENT) MHA (MASTER OF HOSPITAL ADMINISTRATIO	30 40	30 40

					N)		
87	212	TAMRALIPTA INSTITUTE OF MANAGEMENT & TECHNOLOGY	PADUMBASAN, WARD NO. 7, TAMLUK, PURBA MEDINIPUR – 721 636 Tel: (03228) 267937, 9232523324 E-mail: tamraliptait@yahoo.co.in	UG UG UG UG UG PG	BBA BCA B.SC. IN BIOTECHNOLOGY B.SC. IN MICROBIOLOGY BBA (HOSPITAL MANAGEMENT) M.SC. IN COMPUTER SCIENCE	60 60 20 20 40 18	60 60 20 20 40 18
88	213	THE HERITAGE ACADEMY	CHOWBAGA ROAD), P.O. EAST KOLKATA TOWNSHIP, PIN - 700 107 Ph. +91 33 2443-0454/56/57, 2443-1256-58 Fax: +91 33 2443-1259/0455 Email- admin@theheritageacademy.in	UG UG UG PG	BBA BCA B.SC. IN MEDIA SCIENCE M.SC. IN MEDIA SCIENCE	120 120 90 30	120 120 90 30
89	214	SEACOM MANAGEMENT COLLEGE	JALADHULAGORI, SANKRAIL, HOWRAH – 711 302 Tel: (033) 6513-7392 Fax: (033) 2430-9308 E-mail: seacommanagement @rediffmail.com	UG UG UG UG	BBA BCA BTTM BBA (HOSPITAL MANAGEMENT)	90 90 60 60	90 90 60 60
90	215	NIMAS	H.L. NO. 1045/1/A, BARRACKPORE BARASAT ROAD, KOL – 700 125 Tel: (033) 2564-8882 Email: sudip_b1@rediffmail.com	UG UG UG UG UG UG PG UG UG UG UG	1ST SHIFT B.SC IN HOSPITALITY AND HOTEL ADMINISTRATION BBA BCA B.OPTOM (BACHELOR OF OPTOMETRY) BBA (GLOBAL BUSINESS) BBA (HOSPITAL MANAGEMENT)	90 60 60 60 60 60 30 60 60 00 00	90 60 60 60 60 60 30 60 60 **60** **60**

					M.SC. (DIETETICS AND NUTRITION)	00	**60**
				UG	B.SC. IN DATA SCIENCE	00	**60**
				PG	B.SC. IN CYBER SECURITY	00	**60**
				PG	**2ND SHIFT**		
					B.SC. (MEDICAL LAB TECHNOLOGY)		
					BBA (ACCOUNTANCY, TAXATION & AUDITING)		
					B.SC. (PHYSIOTHERAPY MANAGEMENT & HEALTHCARE SCIENCE)		
					M.SC. (HOSPITALITY MANAGEMENT)		
					M.SC. (CLINICAL PSYCHOLOGY)		
91	216	<mark>ABS ACADEMY OF SCIENCE, TECHNOLOGY & MANAGEMENT</mark>	J.P.AVENUE, SAGARBHANGA,DUR GAPUR: 713211 DISTRICT : BURDWAN WEST BENGAL Tel: (0343) 2550697/98 Fax: (0343) 2550699 E-mail: info@absacademy.com	PG	MBA	120	**90**
92	220	<mark>PRAJNANANAND A INSTITUTE OF TECHNOLOGY & MANAGEMENT</mark>	94/2 PARK STREET, KOLKATA – 700 017 (NEAR PARK CRICUS SEVEN POINT CROSSING) Phone : 9830304496, 9830304566 Fax: (033) 2265-9355 Website: http://www.pitmkol.in Email:	UG UG	BBA BCA	30 60	30 60

			info@pitmkol.in				
93	221	GURUKUL MANAGEMENT STUDIES	MOUZA-NARAYANPUR, PS. – JAGADDAL, DIST. – NORTH 24 PARGANAS, WARD NO. – 34, BHATPARA MUNICIPALITY, W.B. – 743126. E-mail: admission@gurukulstudies.com	UG UG UG	B.SC IN HOSPITALITY AND HOTEL ADMINISTRATION BCA **BBA (HOSPITAL MANAGEMENT)**	20 30 00	**40** 30 **30**
94	226	TECHNO INDIA – KOLKATA	EM-4, SALT LAKE CITY, KOLKATA – 700 091	UG UG UG UG UG UG	1ST SHIFT BBA BCA BBA (HOSPITAL MANAGEMENT) 2ND SHIFT BBA BCA BBA (HOSPITAL MANAGEMENT)	120 120 120 60 60 60	120 120 120 **120** **120** 60
95	229	DURGAPUR INSTITUTE OF SCIENCE, TECHNOLOGY AND MANAGEMENT	NEHRU AVENUE, DURGAPUR – 14 Tel: (0343) 2601868, 3290943	UG UG UG UG UG UG UG	BBA BCA B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION BBA (HOSPITAL MANAGEMENT) B.SC. IN BIOTECHNOLOGY B.SC. IN MICROBIOLOGY B.SC. (MEDICAL LAB TECHNOLOGY)	60 30 30 30 30 30 30	60 30 30 30 30 30 30
96	230	CAMELLIA INSTITUTE OF TECHNOLOGY	DIGBERIA, BADU ROAD, MADHYAMGRAM, KOLKATA-700129 Tel: (033) 6455-1660/1145/1146 Fax: (033) 2237-7540 E-mail: camelliagroup.vsnl.n	UG	MECHANICAL ENGINEERING	120	120
				UG	INFORMATION TECHNOLOGY	30	30
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	60	60
				UG	ELECTRICAL	60	60

No	Code	College	Address	Level	Course	Intake	Approved
			et		ENGINEERING		
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	CIVIL ENGINEERING	60	60
97	234	NSHM COLLEGE OF MANAGEMENT & TECHNOLOGY, KOLKATA	124 (60) B. L. SAHA ROAD, KOLKATA – 700 053 Tel: (033) 2403-2301 Fax: (033) 2474-5146 E-mail: info@nshm.com		1ST SHIFT		
				UG	BBA	120	120
				UG	BBA (SUPPLY	30	30
				UG	CHAIN	60	60
				UG	MANAGEMENT)	60	60
				UG	BCA	60	60
				UG	BBA (HOSPITAL MANAGEMENT)	60	60
				UG	B.OPTOM	120	120
				UG	(BACHELOR OF	60	60
				UG	OPTOMETRY)	60	**120**
				UG	B.SC. IN HOSPITALITY AND HOTEL	60	60
				PG	ADMINISTRATION	60	60
				PG	B.SC. IN MEDIA SCIENCE	60	60
				UG	B.SC. IN FASHION	60	**30**
				UG	DESIGN &	00	**30**
				PG	MANAGEMENT	30	30
				UG	B.SC. IN MULTIMEDIA, ANIMATION &	60	60
				UG	GRAPHICS	30	30
				UG	BBA (GLOBAL	30	30
				UG	BUSINESS)	60	60
				UG	M.SC. IN MEDIA SCIENCE	60	60
				UG	MHA (MASTER OF	30	30
				UG	HOSPITAL	60	60
				UG	ADMINISTRATION)	60	60
				UG	B.SC. IN DATA	60	60
				PG	SCIENCE	30	30
				PG	**B.SC. IN VFX FILM**	30	30
				PG	**MAKING**	30	30
				PG	M.PHIL	30	30
				PG	2ND SHIFT	30	30
				PG	B.SC.	30	30
				PG	(BEHAVIOURAL	30	30

				PG	SCIENCE &	60	60
				PG	APPLIED	30	30
				PG	PSYCHOLOGY)	30	**60**
				UG	B.SC. (CULINARY	60	**30**
				UG	SCIENCE)	60	**30**
				UG	BTTM	00	**30**
					BBA (SPORTS		
				PG	MANAGEMENT)	30	30
					B.SC. IN GAMING & MOBILE APPLICATION DEVELOPMENT		
					B.SC. (INTERIOR DESIGNING)		
					B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION		
					B.OPTOM (BACHELOR OF OPTOMETRY)		
					BBA (HOSPITAL MANAGEMENT)		
					MASTER OF OPTOMETRY (MOPTOM)		
					MASTER OF PUBLIC HEALTH		
					M.SC. (DIETETICS AND NUTRITION)		
					M.SC. (DIGITAL FILMS)		
					M.SC. (FASHION MANAGEMENT)		
					M.SC. (VISUAL COMMUNICATION)		
					M.SC. (INFORMATION & CYBER SECURITY)		
					M.SC. (DATA SCIENCE AND ANALYTICS)		
					M.SC. (HOSPITALITY MANAGEMENT)		
					M.SC. (CLINICAL		

					PSYCHOLOGY) B.SC. (FILM & TELEVISION) B.SC. IN CYBER SECURITY **BBA (ACCOUNTANCY, TAXATION & AUDITING)** M.SC. (YOGA)		
98	235	SEACOM MARINE COLLEGE	JALADHULAGORI, VIA ANDUL (MOURI) SANKRAIL, HOWRAH – 711 302 Tel: (033) 2679-0482/83 Telefax: (033) 2679-1929 E-mail: seacommaritime@gmai.com	UG	B.SC. IN NAUTICAL SCIENCE	60	60
99	236	GREATER KOLKATA COLLEGE OF ENGINEERING & MANAGEMENT	DUDHNAI, RAMNAGAR-II, P.S BARUIPUR, 24 PARGANAS (SOUTH) WEST BENGAL, 743387 Telefax: (033) 2430-5897 Email: gkcem.kolkata@yahoo.com	UG	COMPUTER SCIENCE & ENGINEERING	30	30
				UG	ELECTRICAL ENGINEERING	30	30
				UG	ELECTRONICS & COMMUNICATION ENGG	30	30
				UG	CIVIL ENGINEERING	45	45
				UG	MECHANICAL ENGINEERING	45	45
100	238	CAMELLIA SCHOOL OF ENGINEERING & TECHNOLOGY	NADIBHAG, PO: KAZIPARA, BARASAT, NORTH 24 PARGANAS, KOLKATA - 700124. Tel: (033) 2584-4536 E-mail: info@camelliagroup.in	UG	COMPUTER SCIENCE AND ENGINEERING	45	45
				UG	ELECTRONICS & COMMUNICATION ENGG	45	45
				UG	CIVIL ENGINEERING	90	90
				UG	INFORMATION TECHNOLOGY	45	45
				UG	MECHANICAL ENGINEERING	90	90
				UG	ELECTRICAL	90	90

					ENGINEERING		
				PG	CIVIL ENGINEERING	18	18
101	240	ABACUS INSTITUTE OF ENGINEERING AND MANAGEMENT	V ILL-NUTANGRAM; P.O-MOGRA; DIST-HOOGHLY, WEST BENGAL, 712148 Tel: (03213) 202076/89 E-mail: info@abacusinstitut e.com	UG	ELECTRONICS AND COMMUNICATIO NS ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	COMPUTER SCIENCE	60	60
				UG	CIVIL ENGINEERING	60	60
				UG	MECHANICAL ENGINEERING	60	60
102	241	SWAMI VIVEKANANDA INSTITUTE OF SCIENCE & TECHNOLOGY	DAKSHIN GOBINDAPUR, P.S-SONARPUR, KOLKATA-700145 Ph. 033-2437-9913 Telefax: 033-2437-0013 Email: info@svist.org	UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	MECHANICAL ENGINEERING	120	120
				UG	ELECTRICAL AND ELECTRONICS ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATIO N ENGG (INDUSTRY INTEGRATED)	90	90
				UG	CIVIL ENGINEERING	60	60
				UG	REFRIGERATION AND AIR CONDITIONING (B.VOC)	25	25
				UG	AUTOMOTIVE MANUFACTURIN G TECHNOLOGY (B.VOC)	25	25
				PG	MBA	60	60
103	242	BENGAL COLLEGE OF PHARMACEUTICA L SCIENCES & RESEARCH	BIBLABI RASHBEHARI BASU SARANI, BIDHANNAGAR, DURGAPUR PIN- 713 212 DIST: BURDWAN, WEST BENGAL	UG	PHARMACY	100	100

			Tel: (0343) 2532606, 2533189 , 8170021123 Fax: (0343) 2533186 E-mail: skset_pharm@rediff mail.com				
104	243	WEST BENGAL STATE COUNCIL FOR SCIENCE & TECHNOLOGY	BIKASH BHAVAN, (4th floor), SALT LAKE, KOLKATA –7000 91	PG	POST GRADUATE DIPLOMA IN GEOINFORMATICS	20	20
105	244	TECHNO ENGINEERING COLLEGE BANIPUR (FORMERLY TECHNO INDIA – BANIPUR)	BANIPUR COLLEGE ROAD, BANIPUR, HABRA 24 PARGANAS (NORTH) WEST BENGAL- 743233 Tel: (03216) 238138 E-mail: admin@iiitkolkata.c om	UG	ELECTRONICS & COMMUNICATION ENGG	120	**90**
				UG	INFORMATION TECHNOLOGY	30	30
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	MECHANICAL ENGINEERING	60	**30**
106	246	RINPOCHE ACADEMY OF MANAGEMENT AND TECHNOLOGY	CHIRIAMORE, DASPARA, KOIKHALI, 24 PGS (N), KOLKATA – 52 Telefax: (033) 2321- 4291 E-mail: rh.rohit@gmail.com	UG UG	BBA BCA	40 40	40 40
107	250	SWAMI VIVEKANANDA INSTITUTE OF MANAGEMENT & COMPUTER SCIENCE	KARBALA, SONARPUR STATION ROAD, P.O: NARENDRAPUR, KOLKATA-700103 Tel: (033) 2428-3035 E-mail: info@svist.org	PG	MBA	60	60
				UG	BFSI (B.VOC)	25	25
				UG	TRAVEL AND TOURISM (B.VOC)	25	25
108	252	KANAD INSTITUTE OF ENGINEERING & MANAGEMENT	VILLAGE+P.O.- MANKAR, DIST- BURDWAN, MANKAR, BARDHAMAN, WEST BENGAL 713144 Tel: (0343) 2517137/38 E-mail:	UG	CIVIL ENGINEERING	42	42
				UG	COMPUTER SCIENCE & ENGINEERING	30	30
				UG	ELECTRICAL ENGINEERING	42	42
				UG	MECHANICAL	84	84

					ENGINEERING		
			kanadinstituteofeng g@gmail.com				
109	253	SUPREME KNOWLEDGE FOUNDATION GROUP OF INSTITUTIONS	1, KHAN ROAD, MANKUNDU STATION ROAD, P.O. MANKUNDU, DIST. HOOGHLY, WEST BENGAL, PIN-712139 Telefax: (033) 2683-1146 E-mail: skf.mankundu@gma il.com	UG	CIVIL ENGINEERING	30	30
				UG	ELECTRICAL ENGINEERING	30	30
				UG	ELECTRONICS & COMMUNICATIO N ENGG	30	30
				UG	MECHANICAL ENGINEERING	30	30
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				PG	ELECTRICAL ENGINEERING	18	18
				PG	COMPUTER SCIENCE AND ENGINEERING	18	18
				PG	MBA	30	30
110	255	DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPORTS COMPLEX (*FORMERLY DR. SUDHIR CHANDRA SUR DEGREE ENGINEERING COLLEGE*)	MOUZA - KALIDAHA, P.S.- DUM DUM, KOLKATA - 700074 Tel: (033) 2560-0898 Telefax: (033) 2560-0149 E-mail: info@dsec.ac.in	UG	COMPUTER SCIENCE AND ENGINEERING	60	**180**
				UG	ELECTRONICS & COMMUNICATIO N ENGG	120	**60**
				UG	AUTOMOBILE ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	MECHANICAL ENGINEERING	120	**30**
				UG	CIVIL ENGINEERING	60	60
				UG	**ROBOTICS**	00	**30**
				UG	ELECTRONIC MANUFACTURIN G SERVICES (B.VOC)	25	25
				PG	MECHANICAL ENGINEERING	18	18
				PG	COMMUNICATIO N ENGINEERING	09	09
111	257	CAMELLIA INSTITUTE OF TECHNOLOGY &	HALDER DIGHI, G.T. ROAD, BAINCHI, DIST.- HOOGHLY,	UG	CIVIL ENGINEERING	120	120
				UG	MECHANICAL	120	120

					ENGINEERING		
			WEST BENGAL – 712134 Ph. (03213) 271339 / 9007030180	UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	COMPUTER SCIENCE & ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
112	259	GLOBAL INSTITUTE OF MANAGEMENT AND TECHNOLOGY	PALPARA MORE, NH-34, BHATJANGLA, KRISHNAGAR, NADIA, WEST BENGAL, 741101 Tel: (03472) 271211 Fax: (03472) 271311 E-mail: admin@gimt-india.com	UG	MECHANICAL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	30	30
				UG	ELECTRICAL ENGINEERING	60	**30**
				UG	COMPUTER SCIENCE & ENGINEERING	60	60
				UG	CIVIL ENGINEERING	120	**60**
				PG	**COMPUTER SCIENCE AND ENGINEERING (IOT)**	00	**18**
113	260	BENGAL COLLEGE OF ENGINEERING	SHILPO KANAN ROAD, BIDHANNAGAR, DURGAPUR - 713212. Tel: 0343-6512190, 2532606 Fax: 0343-2533186, 2533242 E-mail: skset_dgp@rediffmail.com	UG	COMPUTER SCIENCE AND ENGINEERING	90	90
114	261	SURENDRA INSTITUTE OF ENGINEERING & MANAGEMENT	DHUKURIA, P.O.-NEW CHAMTA, P.S.-MATIGARA, SILIGURI, DARJEELING, WEST BENGAL, 734009 Tel: (0343) 6467517 E-mail: siemslg@gmail.com	UG	ELECTRICAL ENGINEERING	60	**30**
				UG	ELECTRONICS & COMMUNICATION ENGG	60	**30**
				UG	MECHANICAL ENGINEERING	60	60
				UG	COMPUTER SCIENCE &	60	60

					ENGINEERING		
				UG	CIVIL ENGINEERING	60	60
115	263	<mark>REGENT EDUCATION & RESEARCH FOUNDATION GROUP OF INSTITUTIONS</mark>	BARA KANTHALIA, P.O: SEWLI TELINI PARA, P.S: TITAGARH NORTH 24 PARGANAS, KOLKATA 700121 Tel: (033) 2535-3051 Telefax: (033) 2535-3052 E-mail: info@rerf.co.in	UG	CIVIL ENGINEERING	120	120
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	ELECTRICAL AND ELECTRONICS ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	60	60
				UG	MECHANICAL ENGINEERING	60	60
				PG	MBA	60	60
				PG	MASTERS IN COMPUTER APPLICATIONS	60	60
116	264	<mark>SWAMI VIVEKANANDA INSTITUTE OF MODERN SCIENCE</mark>	SONARPUR STATION ROAD, KARBALA, KOLKATA – 700 103 Telefax: 033 2428-3035 Email: info@svist.org		1ST SHIFT		
				UG	BBA	90	90
				UG	BCA	120	120
				UG	B.SC. IN MICROBIOLOGY	60	60
				UG	B.SC. IN BIOTECHNOLOGY	45	45
				PG	BTTM	25	25
				PG	M.SC. IN MEDIA SCIENCE	25	25
				PG	M.SC. IN COMPUTER SCIENCE	25	25
				UG	M.SC. IN BIOTECHNOLOGY	30	30
				UG	B.SC. IN MEDIA SCIENCE	60	60
				UG	2ND SHIFT	30	30
				UG	BBA	45	45
				UG	B.SC. IN MICROBIOLOGY	25	25
					B.SC. IN BIOTECHNOLOGY		

					B.SC. IN MEDIA SCIENCE		
117	265	DOLPHIN SCHOOL OF HOTEL MANAGEMENT	BALINDI, NO. - 7 MOUJA HARINGHATA, NEAR KALYANI MORE, PIN – 741 246 Ph. 03473-279195/196, 9331881914 E-mail: dolphin_kalyani@yahoo.co.in	UG UG PG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION B.SC. (CULINARY SCIENCE) M.SC. (HOSPITALITY MANAGEMENT)	90 60 30	**120** **120** 30
118	266	BENGAL SCHOOL OF TECHNOLOGY & MANAGEMENT	SUGANDHA, DELHI ROAD, HOOGHLY – 712 102 Ph. 033 2686-4913/ 9038552661/8961320467 E-mail: management.bst@gmail.com	UG UG UG	BCA B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION BBA	60 90 60	60 90 60
119	269	MODERN INSTITUTE OF ENGINEERING & TECHNOLOGY	BAROL, MALIMPUR, RAJHAT, BANDEL-HOOGHLY, PIN-712123 Tel: 8336070583 E-mail: director@mietcollege.org	UG	MECHANICAL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	CIVIL ENGINEERING	60	60
120	271	CAMELLIA INSTITUTE OF ENGINEERING AND TECHNOLOGY	BUD BUD BY – PASS (NORTH), PANAGARH, BARDHAMAN, WEST BENGAL, 713403 Tel: 9007030116/0117/0177 E-mail: info@camelliagroup.in	UG	COMPUTER SCIENCE & ENGINEERING	60	60
				UG	CIVIL ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	60	60
				UG	MECHANICAL ENGINEERING	60	60

121	273	NSHM KNOWLEDGE CAMPUS, DURGAPUR – GROUP OF INSTITUTIONS	ARRAH, DURGAPUR, BARDHAMAN, WEST BENGAL, 713212 Tel: (0343) 2533813/814/815, 2561045 Email: info@nshm.com	UG	ELECTRONICS & COMMUNICATION ENGG	60	**30**
				UG	MECHANICAL ENGINEERING	60	**30**
				UG	COMPUTER SCIENCE AND ENGINEERING	60	60
				UG	CIVIL ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	**30**
				UG	**DATA SCIENCE**	00	**30**
				UG	**ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**	00	**30**
				UG	**ROBOTICS**	00	**30**
				UG	HOTEL MANAGEMENT AND CATERING TECHNOLOGY	120	120
				UG	BFSI (B.VOC)	25	25
				UG	**AUTOMOBILE SERVICING (B.VOC)**	00	**30**
				UG	**REFRIGERATION AND AIR CONDITIONING (B.VOC)**	00	**30**
				UG	**TRAVEL AND TOURISM (B.VOC)**	00	**30**
				PG	ELECTRONICS & COMMUNICATION ENGG	18	**09**
				PG	MBA	60	60
122	275	OMDAYAL GROUP OF INSTITUTIONS	PLOT NO: 38(P), 38A, 39A, 39(P) , ULUBERIA INDUSTRIAL GROWTH CENTRE, ULUBERIA, HOWRAH, WEST BENGAL, 711316 Tel: 9831722266	UG	CIVIL ENGINEERING	60	60
				UG	COMPUTER SCIENCE & ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	MECHANICAL ENGINEERING	60	60

			E-mail: contact@oders.in	UG	ARCHITECTURE	80	80
123	276	BUDGE BUDGE INSTITUTE OF TECHNOLOGY	NISCHINTAPUR BUDGE BUDGE, KOLKATA, SOUTH 24 PARGANAS, WEST BENGAL 700137 Tel: (033) 2482-0676/0670 Telefax: (033) 2482-0641 E-mail: contact@bbit.edu.in	UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	120	**60**
				UG	MECHANICAL ENGINEERING	120	**60**
				UG	CIVIL ENGINEERING	120	**60**
				UG	COMPUTER SCIENCE AND ENGINEERING	120	**180**
				UG	**INFORMATION TECHNOLOGY**	00	**60**
				PG	POWER SYSTEMS	30	30
				PG	COMPUTER SCIENCE & ENGINEERING	30	30
				PG	MBA	60	60
124	277	NSHM KNOWLEDGE CAMPUS, KOLKATA – GROUP OF INSTITUTIONS	124(60) B.L. SAHA ROAD, KOLKATA, SOUTH 24 PARGANAS, WEST BENGAL, 700053. Tel: (033) 2403-2301 Fax: (033) 2474-5146 E-mail: info@nshm.com	UG	PHARMACY	100	100
				UG	BFSI (B.VOC)	25	25
				UG	TRAVEL AND TOURISM (B.VOC)	25	25
				UG	MEDICAL IMAGING TECHNOLOGY (B.VOC)	25	25
				PG	PHARMACEUTICS	24	**15**
				PG	PHARMACOLOGY	24	**15**
				PG	MBA	120	**180**
				PG	MBA (PT)	30	30
125	278	SANAKA EDUCATIONAL TRUST'S GROUP OF INSTITUTIONS	INSTITUTE OF ENGINEERING & INDUSTRIAL TECHNOLOGY P.O.-MALANDIGHI, DURGAPUR DIST. - BURDWAN , WEST BENGAL, 713212 Tel: 09434006128	UG	ARCHITECTURE	20	20
				UG	MECHANICAL ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	60
				UG	ELECTRICAL AND ELECTRONICS ENGINEERING	30	30
				UG	COMPUTER SCIENCE & ENGINEERING	60	60

				UG	CIVIL ENGINEERING	60	60
				UG	ELECTRONICS & COMMUNICATION ENGG	30	30
				UG	PHARMACY	60	60
126	279	IDEAL INSTITUTE OF ENGINEERING	KALYANI SHILPANCHAL, P.O.+P.S.-KALYANI, DISTRICT-NADIA, WEST BENGAL, PIN CODE- 741235 Tel: (033) 2502-5628/29 Fax: (033) 2502-5630 E-mail: info@idealinstituteofengineering.com	UG	COMPUTER SCIENCE & ENGINEERING	48	48
				UG	CIVIL ENGINEERING	48	48
				UG	ELECTRICAL ENGINEERING	48	48
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	48	48
				UG	MECHANICAL ENGINEERING	48	48
127	281	GARGI MEMORIAL INSTITUTE OF TECHNOLOGY CAMPUS	BALARAMPUR(MOUZA-BERELIA) P.S-BARUIPUR KOLKATA 700144 Tel: (033) 6535-0032 E-mail: info@gmitkolkata.org	UG	MECHANICAL ENGINEERING	48	48
				UG	ELECTRONICS & COMMUNICATION ENGG	48	48
				UG	ELECTRICAL ENGINEERING	48	48
				UG	COMPUTER SCIENCE AND ENGINEERING	48	48
				UG	CIVIL ENGINEERING	48	48
128	286	ST. MARY'S TECHNICAL CAMPUS KOLKATA	SAIBANA VILLAGE, OPP: WEST BENGAL STATE UNIVERSITY, ICHAPUR NILGUNGE GRAM PANCHAYAT, BARASAT, NORTH 24 PARGANAS DISTRICT, KOLKATA – 700 126 Ph. 09948399402/90072 66031 Fax: 040-66809093	UG	CIVIL ENGINEERING	120	**60**
				UG	**ARTIFICIAL INTELLIGENCE AND DATA SCIENCE**	00	**180**
				UG	**COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)**	00	**180**
				UG	**COMPUTER SCIENCE AND**	00	**180**

					ENGINEERING (DATA SCIENCE)		
				UG	HOSPITALITY AND TOURISM ADMINISTRATION	00	**120**
				PG	MBA (BIG DATA ANALYTICS)	00	**120**
				PG	MBA (DIGITAL MARKETING)	00	**180**
129	287	==ROCKVALE MANAGEMENT COLLEGE==	9TH MILE, RESHI ROAD, KALIMPONG, DARJEELING Tel: +91-3552 259959 E-mail: principal@rockvaleacademy.com	UG UG UG	BBA B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION BBA (HERITAGE TOURISM)	60 30 00	60 30 **30**
130	288	==DARJEELING UNIVERSAL CAMPUS==	TAKDAH CANTONMENT, DIST-DARJEELING, WEST BENGAL – 734222.	UG UG UG UG UG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION BBA BCA BBA (HOSPITAL MANAGEMENT) BBA (ACCOUNTANCY, TAXATION & AUDITING)	00 00 00 00 00	**60** **60** **60** **60** **60**
131	289	==ILEAD (INSTITUTE OF LEADERSHIP ENTREPRENEURSHIP & DEVELOPMENT)==	113J, MATHESWARTOLA ROAD (NEAR PARK REGENCY HOTEL), KOLKATA 700046 Ph. +91-033 4018-2000 / 9830015201	UG UG PG UG UG UG UG UG UG UG	1ST SHIFT BBA B.SC. IN MEDIA SCIENCE AND FILM MAKING M.SC. IN MEDIA SCIENCE B.SC. (FILM & TELEVISION) B.SC. IN ANIMATION & FILM MAKING BBA (SUPPLY CHAIN MANAGEMENT)	120 120 30 60 120 00 00 30 120 60 30	120 120 30 60 120 **30** **30** 30 120 60 30

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					Level	Program		
					UG	**B.SC. IN IT**	30	30
					UG	2ND SHIFT	60	60
					PG	BBA IN REAL	30	30
					PG	ESTATE	30	30
					PG	MANAGEMENT	30	30
					UG	B.SC. IN	30	30
					UG	ANIMATION &	60	60
					UG	FILM MAKING	**00**	**30**
					UG	B.SC. (INTERIOR	**00**	**30**
					UG	DESIGNING)	**00**	**30**
					PG	B.SC.	**00**	**30**
						SUSTAINABLE		
					UG	FASHION DESIGN	50	50
					UG	AND	50	50
						MANAGEMENT		
					UG	B.SC. (CULINARY	50	50
					UG	SCIENCE)	50	50
					UG	B.SC. IN GAMING	50	50
					UG	M.SC. (FASHION	50	50
						MANAGEMENT)		
						M.SC. IN FILM		
						MAKING		
						M.SC. IN DATA		
						ANALYTICS		
						BBA		
						(ENTREPRENEURS		
						HIP)		
						B.SC. IN DATA		
						SCIENCE		
						BTTM		
						BBA (HERITAGE		
						TOURISM)		
						B.SC. IN CYBER		
						SECURITY		
						M.SC.		
						(INFORMATION		
						& CYBER		
						SECURITY)		
						RETAIL (B.VOC)		
						RENEWABLE		
						ENERGY (B.VOC)		
						BEAUTY &		
						AESTHETICS		
						(B.VOC)		
						ANIMATION		
						(B.VOC)		
						THEATRE STUDIES		

					(B.VOC) FASHION DESIGN (B.VOC)		
132	290	<mark>INSTITUTE OF HOTEL AND RESTAURANT MANAGEMENT</mark>	SONARGAON PARK, P.O.- RAMKRISHNAPALLY, TEGHARIA, SONARPUR, KOLKATA – 700150 Telefax: 033 2434-7138/2434-6885/ 9331007995 E-mail: ihrmceo@gmail.com / ihrmkolkata@gmail.com	UG UG UG	BBA B.SC IN HOSPITALITY AND HOTEL ADMINISTRATION BCA	60 60 60	60 60 60
133	291	<mark>NETAJI SUBHASH ENGINEERING COLLEGE</mark>	TECHNO CITY, GARIA, KOLKATA-152	PG	MASTERS IN COMPUTER APPLICATIONS	45	45
134	292	<mark>NETAJI SUBHASH ENGINEERING COLLEGE</mark>	PANCHPOTHA POLICE PARA, GARIA, KOLKATA – 700152	UG UG UG UG	1ST SHIFT BCA BBA 2ND SHIFT B.SC. IN DATA SCIENCE B.SC. IN CYBER SECURITY	120 120 60 60	120 120 60 60
135	294	<mark>FUTURE INSTITUTE OF ENGINEERING AND MANAGEMENT</mark>	SONARPUR STATION RD. , R.K. PALLY, KOLKATA – 150	UG UG UG UG PG PG UG UG UG UG	1ST SHIFT BCA BBA B.SC IN MEDIA SCIENCE BBA (HOSPITAL MANAGEMENT) M.SC. IN MEDIA SCIENCE MHA (MASTER OF HOSPITAL ADMINISTRATION) B.SC. (FILM & TELEVISION) 2ND SHIFT BCA BBA	60 60 60 60 30 30 30 60 60 60	60 60 60 60 **15** 30 30 **30** **30** **30**

					BBA (HOSPITAL MANAGEMENT)		
136	296	PAILAN COLLEGE OF MANAGEMENT & TECHNOLOGY (MBA DIVISION)	BENGAL PAILAN PARK, PHASE-I, AMGACHIA ROAD, JOKA (OFF DIAMOND HARBOUR ROAD), KOLKATA-700104 Tel: (033) 24978006/007, 2453-5605 Fax: (033) 2453-5604 E-mail: pcmt@pcmt-india.net	PG	MBA	30	30
137	297	PAILAN COLLEGE OF MANAGEMENT & TECHNOLOGY	PAILAN PARK, HOUSING PROJECT, PHASE – I, PAILAN Tel: (033) 24978006/007, 2453-5605 Fax: (033) 2453-5604 E-mail: pcmt@pcmt-india.net	UG UG UG UG UG UG UG	BBA BCA B.OPTOM (BACHELOR OF OPTOMETRY) BBA (HOSPITAL MANAGEMENT) B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATIO N B.SC. IN MEDIA SCIENCE BTTM	75 75 30 120 45 45 20	75 75 30 120 45 45 20
138	298	INSTITUTE OF BUSINESS MANAGEMENT & RESEARCH	6/1 SWINHOE STREET KOLKATA – 19 Ph. 033 - 2441-4822/23 Fax: 91-33-2441-4824 E-mail: ibmr@vsnl.com	UG UG UG UG	BBA **BBA (HOSPITAL MANAGEMENT) BBA (SUPPLY CHAIN MANAGEMENT) BBA (ENTREPRENEUR SHIP)**	50 00 00 00	50 **30 30 30**
139	299	CALCUTTA INSTITUTE OF ENGG. AND MANAGEMENT	24/1 CHANDI GHOSH ROAD, KOLKATA – 700 040	UG UG	BBA BCA	40 40	40 40
140	301	B. P. PODDAR INSTITUTE OF	EN 31, SALT LAKE, KOLKATA – 91	UG UG	BCA BBA	90 120	90 120

		MANAGEMENT & TECHNOLOGY	Ph. 2357-2508/09 Fax: 033-2357-2510 E-mail: bppimt@cal3.vsnl.net.in				
141	304	HERITAGE BUSINESS SCHOOL	994, MADURDAHA, CHOWBAGA ROAD, ANANDAPUR, P.O: EAST KOLKATA TOWNSHIP	PG	MBA	180	180
142	306	NARULA INSTITUTE OF TECHNOLOGY	81, NILGUNJ ROAD, AGARPARA, PIN – 743 177	UG UG	BBA BCA	90 120	90 120
143	309	TECHNO INDIA	EM-4/1, SECTOR-V, SALT LAKE, KOLKATA – 700091	UG UG UG UG UG PG UG UG UG UG	1ST SHIFT BBA BCA BBA (HOSPITAL MANAGEMENT) B.SC. IN MEDIA SCIENCE B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION MHA (MASTER OF HOSPITAL ADMINISTRATION) 2ND SHIFT BBA BCA B.SC. IN MEDIA SCIENCE BBA (HOSPITAL MANAGEMENT)	120 120 60 120 60 60 60 60 60 60	120 120 60 120 60 60 60 60 60 60
144	310	MEGHNAD SAHA INSTITUTE OF TECHNOLOGY	MADURDAHA, UCHHAPOTA, KOLKATA – 700 150	UG UG UG UG	1ST SHIFT BBA BCA 2ND SHIFT B.SC. IN DATA SCIENCE B.SC. IN CYBER SECURITY	120 120 60 60	120 120 60 60

145	311	GURUNANAK INSTITUTE OF TECHNOLOGY	157/F NILGANJ RD., PANIHATI, 24 PGS(N)- 743176	UG UG	BBA (HOSPITAL MANAGEMENT) BCA	60 60	60 60
146	312	GURUNANAK INSTITUTE OF HOTEL MANAGEMENT	157/ NILGUNJ ROAD, PANIHATI, W.B. Tel: (033) 2523-1246 Fax: (033) 2289-3945 E-mail: samapika@jisgroup.org	UG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION	120	120
147	313	GURUNANAK INSTITUTE OF PHARMACEUTICAL SCIENCE & TECHNOLOGY	157/F NILGUNJ ROAD, PANIHATI, KOLKATA – 700114 Tel: (033) 2523-1247 Fax: (033) 2528-9000 E-mail: info@gnipst.ac.in	UG UG UG UG UG PG PG PG PG	BBA (HOSPITAL MANAGEMENT) B.SC. IN BIOTECHNOLOGY B.SC. IN MICROBIOLOGY B.SC. IN GENETICS B.SC. (MEDICAL LAB TECHNOLOGY) MASTER OF MANAGEMENT STUDIES (PHARMACEUTICAL MANAGEMENT) M.SC. IN BIOTECHNOLOGY M.SC. IN GENETICS M.SC. IN MICROBIOLOGY	30 40 40 30 30 15 30 30 30	30 40 40 30 30 15 30 30 30
148	314	TECHNO INDIA COLLEGE OF TECHNOLOGY	MEGHA CITY, NEW TOWN, KOLKATA Tel: (033) 27062050 Telefax: (033) 27062060 E-mail: info@ticollege.org	UG UG UG UG	1ST SHIFT BBA BCA 2ND SHIFT B.SC. IN DATA SCIENCE B.SC. IN CYBER SECURITY	60 60 60 60	60 60 60 60
149	318	JIS COLLEGE OF ENGINEERING	BLOCK A, PHASE III, KALYANI, NADIA, PIN – 741 233	UG UG UG	BBA BCA B.SC. IN MEDIA SCIENCE	120 100 60	120 100 60

				UG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION	60	60
150	320	SAROJ MOHAN INSTITUTE OF TECHNOLOGY	GUPTIPARA, HOOGHLY, PIN – 712 512	UG UG UG	BBA BCA BBA (HOSPITAL MANAGEMENT)	60 60 60	60 60 60
151	321	INSTITUTE OF SCIENCE & TECHNOLOGY	DHURABILA, DHAMKURA, PASCHIM MEDINIPUR – 721 201	UG UG UG PG	BBA BCA BBA (HOSPITAL MANAGEMENT) MHA (MASTER OF HOSPITAL ADMINISTRATION)	30 30 30 18	30 30 30 18
152	322	ASANSOL ENGINEERING COLLEGE	KANYAPUR, ASANSOL, BURDWAN, PIN – 713304	UG UG UG	BCA BBA BBA (INSURANCE & RISK MANAGEMENT)	120 120 60	120 120 60
153	323	DR. B. C. ROY ENGINEERING COLLEGE	ACADEMY OF PROFESSIONAL COURSES, JEMUA ROAD, FULJHORE, DURGAPUR, PIN – 713 206	UG UG UG UG UG UG	BBA BCA BBA (HOSPITAL MANAGEMENT) **BBA (SUPPLY CHAIN MANAGEMENT) B.OPTOM (BACHELOR OF OPTOMETRY) B.SC. (MEDICAL LAB TECHNOLOGY)**	120 120 60 00 00 00	120 120 **90** **60** **60** **60**
154	324	BENGAL COLLEGE OF ENGINEERING & TECHNOLOGY	BIDHAN NAGAR, DURGAPUR – 713 212	UG UG UG	BBA BCA BBA (HOSPITAL MANAGEMENT)	90 90 30	90 90 30
155	326	MANAGEMENT INSTITUTE OF DURGAPUR	RAJBANDH, NEAR IOC, BURDWAN – 713 212	UG UG	BBA BCA	100 100	100 100
156	327	ARYABHATTA INSTITUTE OF	PANAGARH, P.O. PANAGARH BAZAR,	UG UG	BBA BCA	60 60	60 60

		ENGINEERING & MANAGEMENT	BURDWAN – 713148	UG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION	30	30
157	328	ABS ACADEMY OF SCIENCE, TECHNOLOGY AND MANAGEMENT	J. P. AVENUE, SAGARBHANGA, DURGAPUR – 713 211 Tel: (0343) 2550697/98 Fax: (0343) 2550699 E-mail: info@absacademy.com	UG UG UG UG UG UG PG	BBA BCA B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION BBA (HOSPITAL MANAGEMENT) B.OPTOM (BACHELOR OF OPTOMETRY) **B.SC. (MEDICAL LAB TECHNOLOGY)** **MASTER OF OPTOMETRY (MOPTOM)**	60 60 60 60 60 00 00	**90** 60 60 **120** 60 **60** **60**
158	329	BENGAL INSTITUTE OF TECHNOLOGY & MANAGEMENT	SRINIKETAN BYPASS, DORANDA, BIRBHUM – 731236	UG UG UG UG UG UG UG UG PG PG	BBA BCA B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION **BBA (HERITAGE TOURISM)** **B.SC. (CULINARY SCIENCE)** **B.SC. IN IT** **B.SC. IN MULTIMEDIA, ANIMATION & GRAPHICS** **B.SC. (CYBER SECURITY)** **M.SC. (HOSPITALITY MANAGEMENT)** **MASTER OF TOURISM &**	60 60 60 00 00 00 00 00 00 00	60 60 **90** **30** **30** **30** **30** **30** **18** **18**

						TRAVEL MANAGEMENT (MTTM)		
159	330	MURSHIDABAD COLLEGE OF ENGINEERING AND TECHNOLOGY	BANJETIA, MURSHIDABAD – 742 102 Ph. 03482-275603/275233 Telefax: 03482-275603	UG UG	BBA BCA		60 60	60 60
160	331	DUMKAL INSTITUTE OF ENGINEERING & TECHNOLOGY	P.O. BASANTAPUR, MURSHIDABAD – 742 406	UG UG	BBA BCA		60 60	60 60
161	332	TECHNO INTERNATIONAL BATANAGAR	PUTKHALI, WARD NO.-30, HOLDING NO.-B7-360/NEW , MAHESHTALA, SOUTH 24 PARGANAS, WEST BENGAL, 700141 Tel+Fax: (033) 2490-0002/2490-0011 E-mail: examcell@tib.edu.in	UG	MECHANICAL ENGINEERING		60	**30**
				UG	ELECTRICAL ENGINEERING		60	**30**
				UG	CIVIL ENGINEERING		60	60
				UG	COMPUTER SCIENCE AND ENGINEERING		60	**120**
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING		60	60
				UG	SOFTWARE DEVELOPMENT (B.VOC)		25	25
162	333	IMS BUSINESS SCHOOL	VILL-MAKRAMPUR, GHUTIARY SHARIF STATION ROAD, P.O.KUSTIA, P.S.SONARPUR, PIN-700150 Ph.033 2426-4168/9831637683 Fax: 91-33-2426-4832 E-mail: tapashsaha@hotmail.com	PG	MBA (GENERAL MANAGEMENT)		60	60
				UG	BFSI (B.VOC)		25	25
				UG	TRAVEL AND TOURISM (B.VOC)		25	25
163	334	SILIGURI INSTITUTE OF	HILL CART ROAD, P.O. - SUKHNA, DIST. - DARJEELING	UG UG	1ST SHIFT BCA BBA		120 120	120 120

		TECHNOLOGY		UG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION	60	60
				UG		60	60
				UG		60	60
				UG	BBA (HOSPITAL MANAGEMENT)	60	60
				UG	BTTM	60	60
				UG	2ND SHIFT	00	**60**
				UG	B.SC. IN DATA SCIENCE	00	**60**
				UG	B.SC. IN CYBER SECURITY		
					BBA		
					BCA		
164	335	SILIGURI INSTITUTE OF TECHNOLOGY (HMCT)	HILL CART ROAD, SUKNA SILIGURI, DARJEELING, WEST BENGAL, 734009	UG	HOTEL MANAGEMENT AND CATERING TECHNOLOGY	45	**60**
165	336	SILIGURI INSTITUTE OF TECHNOLOGY (MCA)	HILL CART ROAD, SALBARI, SILIGURI, DARJEELING, WEST BENGAL, 734009	PG	MASTERS IN COMPUTER APPLICATIONS	60	60
166	337	GLOBAL GROUP OF INSTITUTIONS	AT+P.O.- SRIKRISHNAPUR, P.S- SUTAHATA, HALDIA, DISTRICT - PURBA MEDINIPUR, PIN - 721635 Ph.03224- 273441/9434230392 /9775012347 E-mail: admin@ggihaldia.com	UG	BBA	40	40
				UG	BCA	40	40
				UG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION	90	90
				UG	BBA (HOSPITAL MANAGEMENT)	60	**90**
167	338	IIAS SCHOOL OF MANAGEMENT - SILIGURI	IIAS SCHOOL OF MANAGEMENT, NEAR PINTAIL VILLAGE, DAGAPUR, P.O. PRADHANNAGAR, SILIGURI, (W.B), PIN – 734003 Ph. 0353-2516335 / 9674744820 Fax: 0353-2516335	UG	BBA	40	40
				UG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION	100	100
				UG	**BBA (BUSINESS ANALYTICS)**	00	**20**
				UG	**BBA (ACCOUNTANCY, TAXATION &**	00	**40**

			E-mail: slg_iiassil@bsnl.in		AUDITING)		
168	339	BHARATIYA VIDYA BHAVAN INSTITUTE OF MANAGEMENT SCIENCE	BLOCK FA: SECTOR - III, SALT LAKE CITY, KOLKATA - 700 097. Ph. 2335-8754/1283/1284/0152 Fax: 2335-8754 E-mail: admin@bimskol.org	UG UG UG	BBA BBA (INSURANCE & RISK MANAGEMENT) BBA (SUPPLY CHAIN MANAGEMENT)	60 60 60	60 60 60
169	340	CONTAI COLLEGE OF LEARNING & MANAGEMENT SCIENCE	PADMAPUKHURIA (KUMARPARA), P.O. & P.S.-CONTAI, DIST.-PURBA MEDINIPUR, PIN-721401 (W.B.) Ph.03220-288070/9733593525	UG UG UG	BCA B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATIO N BBA (HOSPITAL MANAGEMENT)	60 30 00	60 30 **30**
170	341	SBIHM SCHOOL OF MANAGEMENT	JAGANNATHPUR ROAD, NEAR BARASAT STATE UNIVERSITY P.O. MALIKAPUR P.S. BARASAT, KOLKATA - 700 126. Ph. 9830012536/2359-8508 E-mail: hrd_sbihm@yahoo.in	UG UG UG UG UG UG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATIO N BBA BCA BBA (HOSPITAL MANAGEMENT) B.SC. IN MEDIA SCIENCE BTTM	120 60 60 120 60 60	120 60 60 120 60 60
171	342	FUTURE INSTITUTE OF TECHNOLOGY	240, BORAL MAIN ROAD, GARIA, KOLKATA, WEST BENGAL, 700154	UG	COMPUTER SCIENCE & ENGINEERING	60	60
				UG	ELECTRONICS AND COMMUNICATIO NS ENGINEERING	60	60
				UG	ELECTRICAL ENGINEERING	60	**30**
				UG	CIVIL ENGINEERING	60	**30**
				UG	COMPUTER SCIENCE AND ENGINEERING	00	**60**

No.	Code	Institution	Address	Level	Programme	Col A	Col B
					(ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)		
				UG	COMPUTER SCIENCE AND ENGINEERING (INTERNET OF THINGS AND CYBER SECURITY INCLUDING BLOCK CHAIN TECHNOLOGY)	00	**60**
172	343	HEMNALINI MEMORIAL COLLEGE OF ENGINEERING	MOUZA-BALINDI, J.L. NO. 7, P.S. HARINGHATA, DIST.-NADIA, PIN-741246, KALYANI, NADIA, WEST BENGAL, 741246	UG	CIVIL & ENVIRONMENTAL ENGINEERING	30	30
				UG	CIVIL ENGINEERING	30	30
				UG	MECHANICAL ENGINEERING	30	30
				UG	COMPUTER SCIENCE & ENGINEERING	30	30
				UG	FOOD TECHNOLOGY	30	30
173	344	INSPIRIA KNOWLEDGE CAMPUS	HIMACHAL VIHAR – PHASE II, MATIGARA, SILIGURI – 734010, DISTRICT – DARJEELING, WEST BENGAL. Ph. +913532571111/1257 E-mail: contact@inspiria.net.in	UG	BBA (HOSPITAL MANAGEMENT)	60	60
				UG	BBA	60	60
				UG	BCA	60	60
				UG	B.SC. IN MEDIA SCIENCE	60	60
				UG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION	60	60
				UG	BBA (GLOBAL BUSINESS)	60	60
				UG	BBA (SPORTS MANAGEMENT)	30	30
				UG	B.SC. IN MULTIMEDIA, ANIMATION & GRAPHICS	30	30
				UG	B.SC. (FILM & TELEVISION)	30	30
				UG		30	30
				UG		00	**30**
				UG		00	**30**
				UG		00	**60**

					BBA (ENTREPRENEURSHIP) **B.SC. (INTERIOR DESIGNING)** **BBA (ACCOUNTANCY, TAXATION & AUDITING)**		
174	345	GLOBAL COLLEGE OF SCIENCE AND TECHNOLOGY	PALPARA MORE, NH – 34, KRISHNAGAR, NADIA, PIN – 741102.	UG UG UG	B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION BCA **BBA**	60 60 00	60 60 **60**
175	346	ELITTE COLLEGE OF ENGINEERING	P.O. KARNAMADHABPUR (NEAR MOHISPOTA), P.S. GHOLA, SODEPUR, KOLKATA – 700113, BARRACKPUR, NORTH 24 PARGANAS, WEST BENGAL – 700113.	UG	ELECTRICAL ENGINEERING	54	54
				UG	CIVIL ENGINEERING	54	54
				UG	MECHANICAL ENGINEERING	108	108
				UG	COMPUTER SCIENCE & ENGINEERING	54	54
176	347	JLD ENGINEERING AND MANAGEMENT COLLEGE	MOUZA, BEGAMPUR, PO-TENTULIA, PS-BARUIPUR, SOUTH 24 PARGANAS, WEST BENGAL – 743610.	UG	**COMPUTER SCIENCE AND ENGINEERING**	00	**60**
				UG	**ELECTRONICS AND COMMUNICATIONS ENGINEERING**	00	**60**
				UG	**MECHANICAL ENGINEERING**	00	**60**
				UG	**ELECTRICAL ENGINEERING**	00	**60**
				UG	**CIVIL ENGINEERING**	00	**60**
177	348	EMINENT COLLEGE OF MANAGEMENT & TECHNOLOGY	MOSHPUKUR, BARBARIA, VILL – PASCHIM KHILKAPUR, BARASAT, WEST	UG UG UG UG PG	BBA BCA BBA (HOSPITAL MANAGEMENT) **B.OPTOM**	60 60 60 00 15	60 60 **30** **30** 15

			BENGAL, PIN – 700 126.		(BACHELOR OF OPTOMETRY) M.SC. IN COMPUTER SCIENCE		
178	349	COOCH BEHAR GOVERNMENT ENGINEERING COLLEGE	HARINCHAWRA, P.O. – GHUGHUMARI, DIST – COOCHBEHAR, PIN – 736170.	UG	CIVIL ENGINEERING	54	**60**
				UG	COMPUTER SCIENCE & ENGINEERING	54	**60**
				UG	ELECTRICAL ENGINEERING	54	**60**
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	54	**60**
				UG	MECHANICAL ENGINEERING	54	**60**
179	350	RAMKRISHNA MAHATO GOVERNMENT ENGINEERING COLLEGE PURULIA (FORMERLY PURULIA GOVERNMENT ENGINEERING COLLEGE)	VILLAGE – CHAS MORE, P.O. – CHAS ROAD, P.S. – JOYPUR, DIST. – PURULIA.	UG	CIVIL ENGINEERING	54	**60**
				UG	COMPUTER SCIENCE & ENGINEERING	54	**60**
				UG	ELECTRICAL ENGINEERING	54	**60**
				UG	ELECTRONICS AND COMMUNICATIONS ENGINEERING	54	**60**
				UG	MECHANICAL ENGINEERING	54	**60**
180	351	SWAMI VIVEKANANDA INSTITUTE OF MODERN STUDIES	BARA KANTHALIA, BARRACKPORE, P.O.: SEWLI TELINI PARA, DIST:- NORTH 24 PARGANAS, PIN – 700121. Ph. 033-30085446/5434/5433 Fax – 033-30085441	UG UG	BBA BCA	60 60	60 60
181	352	P. G. INSTITUTE	DHURABILA,	UG	PHARMACY	60	60

		OF MEDICAL SCIENCES	DHAMKURIA, CHANDRAKONA TOWN, PASCHIM MEDINIPUR, WEST BENGAL – 721201. Ph. 03225-266644				
182	353	BIRBHUM PHARMACY SCHOOL	MOUZA – BANDHERSOLE, PS – SADAIPUR, PO – HETAMPUR, CHINPAI GRAM PANCHAYAT, CHINPAI, BIRBHUM, WEST BENGAL – 731124.	UG	PHARMACY	60	60
183	354	EMINENT COLLEGE OF PHARMACEUTICA L TECHNOLOGY	MOSHPUKUR, BARBARIA, PO: JAGANNATHPUR, BARASAT, KOLKATA – 700 126. Ph. 9830052706 / 9434180053	UG	PHARMACY	60	60
184	355	GHANI KHAN CHOUDHURY INSTITUTE OF ENGINEERING AND TECHNOLOGY	NARAYANPUR, MALDA, MALDA, WEST BENGAL – 732141. Ph. 8974055106	UG	ELECTRICAL ENGINEERING	60	60
				UG	MECHANICAL ENGINEERING	60	60
				UG	FOOD TECHNOLOGY	60	60
185	356	GLOBAL COLLEGE OF PHARMACEUTICA L TECHNOLOGY	PALPARA MORE, NH-34, KRISHNANAGAR, NADIA, W.B., INDIA – 741102. Ph. 03472-271211 Fax : 03472-271311 E-Mail: admngcpt@gmail.co m	UG	PHARMACY	60	60
186	358	SUBHAS BOSE INSTITUTE OF	RAJARHAT MAIN ROAD, ACTION AREA	UG	B.SC. IN HOSPITALITY AND	60	**120**

		HOTEL MANAGEMENT	I, JATRAGACHI, P.O. GHUNI, P.S. – NEWTOWN, KOLKATA – 700157.	UG UG PG	HOTEL ADMINISTRATION B.SC. IN FASHION DESIGN & MANAGEMENT B.SC. (CULINARY SCIENCE) M.SC. (HOSPITALITY MANAGEMENT)	60 60 60	60 60 **120**
187	359	SUSRUT EYE FOUNDATION & RESEARCH CENTRE	HB-36/A/1, SECTOR III, SALT LAKE, KOLKATA – 700106.	PG	MASTER OF OPTOMETRY (MOPTOM)	10	10
188	361	WEBEL DQE ANIMATION ACADEMY	WEBEL BHAVAN, BLOCK: EP & GP, SECTOR V, BIDHANNAGAR, SALT LAKE, KOLKATA – 700 091.	UG UG	B.SC. IN 3D ANIMATION FILM MAKING B.SC. IN VFX FILM MAKING	40 40	40 40
189	362	GITANJALI COLLEGE OF PHARMACY	VILL+P.O.-LOHAPUR, P.S – NALHATI, DIST – BIRBHUM PIN – 731237, WEST BENGAL.	UG	PHARMACY	60	60
190	363	M.R. COLLEGE OF PHARMACEUTICAL SCIENCES AND RESEARCH	Vill+P.O. BALISHA, P.S.-ASHOKANAGAR, DIST. NORTH 24 PARGANAS, PIN – 743702, WB.	UG	PHARMACY	60	60
191	364	SUPREME INSTITUTE OF MANAGEMENT AND TECHNOLOGY	1, KHAN ROAD, P.O. MANDUNDU, DIST: HOOGHLY – 712139	UG UG UG UG UG UG UG UG	BBA BCA BBA (HOSPITAL MANAGEMENT) B.OPTOM (BACHELOR OF OPTOMETRY) **B.SC. IN HOSPITALITY & HOTEL ADMINISTRATION**	60 60 60 60 00 00 00 00	60 60 60 60 **60** **60** **60** **60**

					B.SC. IN CYBER SECURITY B.SC. (MEDICAL LAB TECHNOLOGY) B.SC. IN MULTIMEDIA, ANIMATION & GRAPHICS		
192	365	ANAND COLLEGE OF EDUCATION	VILL – KABILPUR, P.O. DEBRA, DIST. – PASCHIM MEDINIPUR, PIN – 721126, W.B.	UG	PHARMACY	60	60
193	366	INSTITUTE OF ENGINEERING & MANAGEMENT	SECTOR V, SALT LAKE KOLKATA – 700 091 Ph. 033 2357-2969/2059/2995/8189 Fax: 91-33 2357-8302 E-mail: director@iemcal.com	UG UG PG UG UG UG UG UG	1ST SHIFT BCA BBA M.SC. IN COMPUTER SCIENCE **B.SC. IN DATA SCIENCE** **B.SC. IN IT** **BBA (BUSINESS ANALYTICS)** 2ND SHIFT BCA BBA	120 120 20 00 00 00 60 60	120 120 20 **60** **60** **60** 60 60
194	375	TECHNO INTERNATIONAL KOLKATA SOUTH	350, PRANTIK PALLY, HATISUR, NEAR KASBA, KOLKATA – 700107	UG UG UG UG	**BTTM** **B.SC. IN HOSPITALITY AND HOTEL ADMINISTRATION** **B.SC. (CULINARY SCIENCE)** **BBA (ENTREPRENEURSHIP)**	00 00 00 00	**60** **60** **60** **60**
195	376	BENGAL COLLEGE OF PHARMACEUTICAL TECHNOLOGY	WARD NO. 8, NOTUNPALLY, CINEMA HALL PASS ROAD, P.O. + P.S.- DUBRAJPUR, DIST.- BIRBHUM, PIN-731123, WEST BENGAL.	UG	**PHARMACY**	00	**100**

196	377	RCC INSTITUTE OF INFORMATION TECHNOLOGY (NON-AICTE)	CANAL SOUTH ROAD, BELIAGHATA, KOLKATA – 700 015.	UG	BCA	00	60
197	381	KANYASHREE COLLEGE	BEHALA, GOVT. OF WEST BENGAL KOLKATA.	UG	BCA	00	25
198	382	DMBH INSTITUTE OF MEDICAL SCIENCE	VILL & P.S. – DADPUR, P.O. – PUINAN, DIST.- HOOGHLY, TARAKESWAR, WEST BENGAL, PIN-712305.	UG	PHARMACY	00	60