



# MIST

MILITARY  
INSTITUTE OF  
SCIENCE AND  
TECHNOLOGY,  
BANGLADESH

# Newsletter



## MOTTO, VISION AND MISSION OF MIST

**Motto of MIST :** Technology for Advancement

**Vision of MIST :** To be a center of excellence for providing quality education in the fields of science, engineering and technology and conducting research to meet the national and global challenges.

**Mission of MIST :** Provide comprehensive education and conduct research in diverse disciplines of science, engineering, technology and engineering management.

Produce technologically advanced intellectual leaders and professionals with high moral and ethical values to meet the socio-economic development of Bangladesh and global needs.

Conduct collaborative research activities with national and international communities for continuous interaction with academia and industry.

Provide consultancy, advisory, testing, and other related services to government, non-government and autonomous organizations including personnel for widening practical knowledge and to contribute in sustainable development of the society.

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## COMMANDANT'S FOREWORD

The establishment of the Military Institute of Science and Technology (MIST) marked a significant milestone in advancing engineering education in Bangladesh. Recognized as a leading engineering institution, MIST embarked on its journey on 19 April 1998 and has since become a key contributor to the development of science and technology education in the country. The institution aims to be a 'Center of Excellence' for providing quality education in the fields of science, engineering and technology and conducting research to meet the national and global challenges. MIST strives to produce technologically advanced intellectual leaders and professionals with high moral and ethical values to meet the socio-economic development of Bangladesh and global needs. MIST continues to shape future leaders and technologists through high-quality education, focused research and innovation. As we grow, our vision remains steadfast: to secure a place of distinction among the world's premier academic institutions.



It is my privilege to present the 45<sup>th</sup> issue of our official newsletter, a vibrant chronicle of MIST's recent milestones, achievements, and dynamic activities. This publication is a reflection of the relentless dedication and enthusiasm of the MIST family. I extend my heartfelt appreciation to the Editorial Board for their meticulous efforts in creating this edition. May these endeavours inspire us to aim higher and achieve even greater milestones in the times to come.

## GOVERNING BODY MEETING OF MIST



The '43<sup>rd</sup> meeting of the Governing Body of the MIST' was held on 17 December 2024. The meeting was chaired by Major General Md Nasim Parvez, BSP, ndc, afwc, psc, Commandant of MIST. Major General Md Hasan Uz Zaman, ndu, afwc, psc, M Phil, Engineer-in-Chief of the Bangladesh Army attended the meeting as Vice Chairman. Representatives from the Ministry of Education, Ministry of Defence, Ministry of Finance, Armed Forces Division, Three Services Headquarters, BMA, BNA, BAFA as well as academicians from BUET, BUP and Dhaka University, along with officers from MIST also participated in the meeting. The discussions covered various important topics, including the anticipated expenditure for contractual faculty members and staff for the 2023-2024 (Fall) and 2024-2025 (Spring) terms, as well as the funding for seminars, conferences, workshops and training programmes. Key academic issues were also addressed, such as the launch of the MSc/M Engineering programme

in the Industrial and Production Engineering (IPE) Department starting in the April 2025 semester. Additionally, the meeting discussed the revision of academic fee rates for foreign students, the creation of a Chief Engineer position and the establishment of an Engineering Cell under their supervision. Other topics included policy and financial approval for subscriptions to e-resources (e-books and e-journals), as well as the integration of a learning management system into UNIPLEX. Appropriate decisions were made on all the matters discussed.

## COMMITTEE FOR ADVANCED STUDIES AND RESEARCH (CASR) MEETING OF MIST

The '38<sup>th</sup> meeting of the Committee for Advanced Studies and Research (CASR) of the MIST was held on 31 October, 2024. The meeting was chaired by Major General Md Nasim Parvez, BSP, ndc, afwc, psc, Commandant of MIST. Representatives from BUET and BUP also participated in the meeting. The committee discussed several critical matters pertaining to postgraduate students, including the selection of supervisors, evaluation of research proposals, allocation of research costs and approval of defense boards. These discussions aimed to ensure the smooth progression and academic rigor of postgraduate research programmes at MIST. Appropriate decisions were made to address these issues effectively.



## 5<sup>th</sup> INDUSTRIAL ADVISORY PANEL MEETING OF NAME DEPARTMENT



The '5<sup>th</sup> Industrial Advisory Panel (IAP) Meeting' of the Naval Architecture and Marine Engineering (NAME) Department was held on 17 October 2024. The panel consisted of representatives from various shipbuilding industries and academic institutions, all dedicated to preparing students for the workforce and supporting national development. Commodore Md Mohidul Hasan, (E), OSP, psc, BN, Head of the NAME Department, emphasized the crucial role of the IAP in guiding

the department through the Outcome-Based Education (OBE) process and offering valuable mentorship in areas such as curriculum development and industrial training. The meeting included discussions on departmental updates since the previous IAP meeting, as well as the outcomes and actions from the last session.

## 1<sup>st</sup> INDUSTRIAL ADVISORY PANEL MEETING OF EWCE DEPARTMENT

The '1<sup>st</sup> Industrial Advisory Panel (IAP) Meeting' of the Environmental, Water Resources and Coastal Engineering (EWCE) Department was held on 17 November 2024. The Chairman welcomed all distinguished members and expressed appreciation for their participation. He encouraged everyone to provide valuable insights to ensure a successful collaboration between industry and academia. During the meeting, the advisory board members offered constructive suggestions to enhance the department. They discussed the three Programme Educational Objectives (PEOs) and the panel expressed satisfaction with the existing PEOs, recommending that they be continued.



## EDITORIAL BOARD MEETING OF MIST INTERNATIONAL JOURNAL OF SCIENCE AND TECHNOLOGY (MIJST)



The 'Editorial Board Meeting of the MIST International Journal of Science and Technology (MIJST)' was organized by the Research and Development Wing of MIST on 12 December 2024. The event was graced by Major General Md Nasim Parvez, BSP, ndc, afwc, psc, Commandant of MIST, who served as the Chief Patron. The primary objective of MIJST is to provide a platform for academic and scientific research, particularly in the fields of science and technology. The

establishment of a dedicated editorial board, consisting of experts from various scientific and technological disciplines, was a significant milestone in the journal's development. The editorial board is committed to ensuring that the journal upholds rigorous standards of peer review, quality and academic integrity.

## 1<sup>st</sup> NATIONAL RESEARCH CONCLAVE - 2024



On 01 October 2024, the Mechanical Engineering (ME) Department of MIST organized the '1<sup>st</sup> National Research Conclave-2024'. Major General Md Nasim Parvez, BSP, ndc, afwc, psc, Commandant of MIST, attended the event as the chief guest. The conference provided an excellent platform for networking, collaboration and the presentation of research findings, promoting innovation and development in both academic and applied research. A poster presentation was also featured

as part of the conclave. Students and faculty members from BUET, RUET, KUET, AUST and Dhaka University participated in the event, where 22 research papers and 11 research posters were presented and displayed.

## SEMINAR ON ADVANCEMENT IN SUSTAINABLE INFRASTRUCTURE

On 12 December 2024, the Department of Civil Engineering (CE) at MIST organized a seminar on 'Advancement in Sustainable Infrastructure.' Brigadier General Md Kamal Uddin Komol, psc, Head of the Department of CE, attended as the chief guest. The seminar featured Assistant Professor Dr. Ahmed Bediwy from the Civil Engineering Department at United Arab Emirates University as the resource person. Dr. Bediwy shared his recent advancements in sustainable infrastructure, which address critical challenges posed by climate change and the pursuit of zero-emission goals. His research focuses on integrating waste materials, such as mine tailings, glass powder and wood ash, into high-performance concrete. This innovative approach reduces environmental impact while enhancing structural durability. The presentation showcased how sustainable construction practices can contribute to achieving net-zero emissions and creating resilient infrastructure for the future.



## SPECIAL TRAINING SESSION ON TRAFFIC STUDIES AND PAVEMENT DESIGN SESSIONAL



On 08 December 2024, the Department of Civil Engineering (CE) organized a special training session on 'Traffic Studies and Pavement Design Sessional' for Level-04 students. The intensive session was conducted by Training Specialist Mahmudul Hasan Shovon from PTV Group, Germany. The training focused on both theoretical concepts and practical methodologies related to traffic studies and pavement design, which are essential for developing safe, efficient and sustainable transportation systems.

## ACADEMIC AFFAIRS

### RESEARCH INCENTIVE AWARDING CEREMONY & ONLINE LAUNCHING OF MIJST (DECEMBER 2024)



The 'Research Incentive Awarding Ceremony-2023' and the online launch of the December 2024 issue of MIST International Journal of Science and Technology (MIJST) were held at MIST on 26 December 2024. The event was organized by the Research and Development (R&D) Wing, MIST. Major General Md Nasim Parvez, BSP, ndc, afwc, psc, Commandant of MIST, graced the ceremony as the chief guest. He awarded incentives, certificates and crests to the top ten researchers for their Scopus-indexed publications in 2023 and to the leading researcher from MIJST. Professor Dr. Md Enamul Haque, Department of Biomedical Engineering received recognition for publishing the highest number of Scopus-indexed papers (29) in 2023, while Lieutenant Colonel Md Zahidul Islam, PhD, Department of Civil Engineering was honored for his significant contributions to MIJST publications. The event also featured speeches from Brigadier General Md Sajjad Hossain, Director of the R&D Wing, and Professor Dr. Firoz Alam, Editor-in-Chief of MIJST, who participated via video

teleconference from Australia. Deans, Department Heads, faculty members, researchers and selected students from various departments attended the ceremony. In 2023, MIST researchers produced 223 Scopus-indexed publications, demonstrating their commitment to excellence in research.

### DIGITAL SKILL DEVELOPMENT FOR GOVERNMENT OFFICIALS

The Department of Computer Science and Engineering (CSE) organized three training sessions titled 'Digital Skill Development for Government Officials' in November 2024. The sessions were jointly conducted by the Enhancing Digital Government and Economy (EDGE) project, the Bangladesh Computer Council under the Information and Communication Technology (ICT) Division, and the Center for Advanced Computing and Research (CACR) at MIST. The training aimed to enhance the the proper use of technology in governance. As digital transformation



becomes increasingly adopted by governments globally, it is crucial for government officials to acquire the necessary skills to manage digital tools, platforms, and data effectively.

## TRAINING ON ULTRASOUND MACHINE



The Biomedical Engineering (BME) Department organized a comprehensive three-day training on 'Ultrasound Machines' from 21 October to 23 October 2024. The training was provided to faculty members and laboratory staff, significantly enhancing their skills and understanding of ultrasound technology. The hands-on sessions and detailed guidance helped them gain valuable insights into operating and interpreting ultrasound imaging, which will prove essential in their teaching and research. This

training will streamline their current practices and lay a strong foundation for advanced studies and clinical research. Faculty members expressed that the training has equipped them with knowledge that will benefit their future projects, contributing to academic growth and improved healthcare outcomes.

## SHORT COURSE ON DEEP LEARNING AND COMPUTATIONAL FLUID DYNAMICS (CFD)

The Biomedical Engineering (BME) Department recently hosted an enriching two-week short course on 'Deep Learning and Computational Fluid Dynamics (CFD)' from 17 November to 28 November 2024. The course was designed to bridge theory and practice, offering a balanced mix of theoretical knowledge and hands-on training. Participants explored the applications of deep learning and the fundamentals of CFD, focusing on simulating fluid flow in diverse systems. The interactive sessions



enabled attendees to gain practical insights into these cutting-edge tools, preparing them to tackle real-world challenges in the field. The programme culminated in a certification ceremony, where participants and faculty members were honoured with certificates for their successful completion of the course. The ceremony was graced by Colonel Mohummad Shariful Islam, psc, Head of the BME Department, who commended the participants for their dedication and hard work in mastering these advanced topics.

## ORIENTATION TRAINING VISIT OF BCS & BJS – 82



Department. During the visit, they were introduced to research work in all labs.

On 23 October 2024, Officers from the Bangladesh Civil Service (BCS) and Bangladesh Judicial Service (BJS) – 82 visited the Military Institute of Science and Technology (MIST). The team was briefed by Commander S M Fajlul Karim, (C), BCGM, BN, BN, GSO-1, (Academic) on MIST's different activities and facilities. After the briefing, they visited the Concrete Lab and Structural Mechanics Lab of the CE Department, the Cyber Range Lab of the CSE Department and the Biomaterials Lab of the BME advanced equipment and specialized tools used in

## ALUMNI MEET - 2024 OF NAME DEPARTMENT



On 18 October 2024, the Department of Naval Architecture and Marine Engineering (NAME) organized the 'Alumni Meet - 2024'. The Chairman formally welcomed the alumni members and faculty of the NAME Department, emphasizing the association's crucial role in creating career opportunities for graduates through job placements, career development programmes and workshops. An update on the previous meeting, recent activities, and upcoming events of the NAME Department was presented to the attendees. Following the prior

meeting's recommendation and the accreditation requirement to establish a website for the departmental alumni association, the Chairman soft-launched the NAAMIST website: <https://naamist.mist.ac.bd>. The meeting continued with an open discussion, where alumni members shared insights on job opportunities for NAME graduates, strategies for enhancing industry experience and ways to improve practical knowledge.

## ALUMNI MEET - 2024 OF EWCE DEPARTMENT

On 09 November 2024, the 'Alumni Meet - 2024' was organized by the Department of Environmental, Water Resources and Coastal Engineering (EWCE). Brigadier General Md Kabir Uddin Sikder, ndc, psc, Head of the Department of EWCE, chaired the programme. These events provided alumni with an opportunity to reconnect with their peers, faculty members, and staff from the institution, share experiences, network professionally and participate in activities celebrating the institution's history and achievements. Alumni meetings often serve as a platform for professional networking, allowing former students to help each other with job opportunities, business ventures and mentorship. The day marked a new beginning in the collaboration between alumni and faculty members of the EWCE Department.



# DELEGATIONS

## VISIT OF PUBLIC WORKS DEVELOPMENT (PWD) TEAM TO MIST



On 17 October 2024, a team from the Public Works Department, led by Rafia Begum, Superintending Engineer of the PWD E/M Planning Circle in Dhaka, visited the EECE Department laboratories and the CATS facilities. To ensure the quality and compliance with standards, PWD typically needs to test various electro-mechanical equipment used in the buildings they construct. During the visit, the PWD team examined all the laboratories and CATS facilities of the EECE Department,

where the respective Officers-in-Charge provided briefings on the laboratory equipment, testing facilities, and other available resources. The PWD team expressed pleasure with the facilities available and showed a strong interest in collaborating and utilizing them for their testing.

## VISIT OF MAEDA CORPORATION, CIVIL ENGINEERING DIVISION, JAPAN

On 04 December 2024, an esteemed delegation from MAEDA Corporation's Civil Engineering Division, Japan, visited the Civil Engineering Department of MIST. The delegation, comprising industry experts and senior engineers, arrived to explore potential areas for collaboration and foster deeper knowledge exchange between MIST and MAEDA Corporation. This visit marked a significant milestone in the ongoing relationship between the institution and MAEDA Corporation, a leading name in the civil engineering sector globally.



## PRESENTATION BY REPRESENTATIVE OF ASTHA LIFE INSURANCE COMPANY LTD



On 27 October 2024, a presentation was given by the representative of Astha Life Insurance Company Ltd at MIST. Astha Life Insurance Company Ltd, the only life insurance company of the Bangladesh Army, is a brand-new company in the marketplace. The company is the first to offer life insurance services to the Armed Forces, Paramilitary personnel and the general masses. The company started its journey to bring about a positive change in the current insurance industry

with its fully digitalized operations, innovative and diversified product lines and reliable services. All members of MIST have attended the session. This presentation aimed to help convey all critical aspects of Astha Life Insurance while engaging the audience with clear and impactful messaging.

## ACHIEVEMENTS

### HONORED WITH BSP MEDAL FOR OUTSTANDING CONTRIBUTION TO TELECOMMUNICATION SECTOR



Major General Md Nasim Parvez, BSP, ndc, afwc, psc, Commandant, MIST was awarded with prestigious Bishishto Seba Padak (BSP) for his outstanding contribution to telecommunication sector in Bangladesh. As the Director General of BTRC, Major General Nasim (the then Brigadier General) took the initiative to introduce the broadband internet tariff at flat rate throughout country by eliminating the price discrimination of tariff between city and rural areas popularly known as "এক দেশ এক রেট" (one country, one rate) tariff. The General was awarded with BSP by the Chief of Army Staff, Bangladesh Army for this outstanding contribution for the country.

### HONORED WITH SPP FOR CONTRIBUTIONS TO RADIOLOGY TRAINING

Lieutenant Colonel Mohammad Mamun-Ur-Rashid, FCPS, MCPS, AMC, Medical Officer at MIST, authored the pioneering book Essentials of Radiology & Imaging for Residents & Technicians. This is the first book on radiology written by a Bangladeshi radiologist since the liberation war. The book has received official recognition from the Directorate General of Medical Services (DGMS) and has been included in its training syllabus. In acknowledgment of his groundbreaking work and its impact on training radiographers and health professionals, the Bangladesh Army awarded Lieutenant Colonel Mamun the prestigious Sena Parodorshita Padak (SPP). The honor was conferred by Major General Md Mostagousur Rahman Khan, BSP, SGP, ndc, afwc, psc, M Phil, General Officer Commanding (GOC) and Area Commander, Logistics Area, Dhaka.



### ACHIEVEMENT ON THE JOLSHIRI RUNBANGLA HALF MARATHON - 2024



Professor Dr AKM Badrul Alam demonstrated exceptional athleticism by successfully completing the Jolshiri Runbangla Half Marathon 2024, a challenging 21.1 km event held on November 30 at Jolshiri Abashon in Dhaka. He achieved a commendable finish time of 2 hours and 2 minutes, securing the 95th position overall among 657 participants. Notably, Prof. Badrul placed 8th in the Male Open 45-59 category, showcasing his competitive spirit and endurance with an impressive average pace of 5.47 minutes per kilometre. His performance not only highlights his commitment to physical fitness but also serves as an inspiration to both his students and colleagues.

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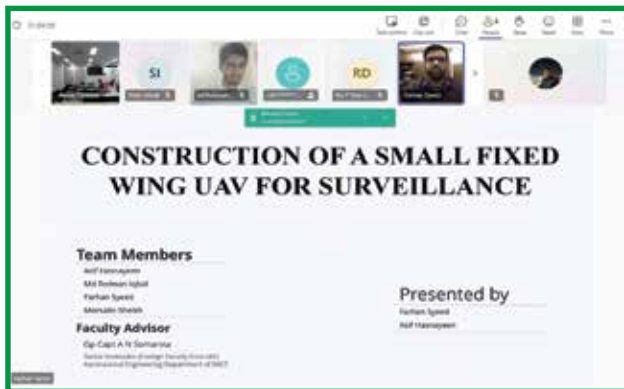
# ACHIEVEMENTS

## INDIGENOUSLY DEVELOPED UAV EXHIBITION



A team of four talented students from the Aeronautical Engineering Department of MIST showcased their innovative project, 'Fixed Wing UAV for Surveillance,' at the Indigenously Made UAV Project Exhibition organized by the Army Aviation Group on 12 November 2024 at Jolshiri Golf Club. The event was graced by Chief of Army Staff, Bangladesh Army, General Waker-Uz-Zaman, SBP, OSP, SGP, psc as Chief Guest. The team's UAV was successfully flown during the exhibition, earning high praise from judges, international experts, and aerospace professionals for its design, functionality, and potential applications. In recognition of their outstanding efforts, the team was awarded with a certificate and a reward worth \$300, which will be sent from overseas. This achievement not only highlights the dedication and ingenuity of MIST's students and faculty but also underscores the institution's commitment to advancing aerospace technology and innovation on both national and international platforms.

## AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS (AIAA) INTERNATIONAL STUDENT CONFERENCE



The American Institute of Aeronautics and Astronautics (AIAA) hosted its International Student Conference on 25 and 26 November 2024 at Swinburne University of Technology in Hawthorn, Melbourne, Australia. This hybrid event provided a global platform for undergraduate and graduate students to present their innovative projects and research in the aerospace and aeronautics industry. A team of four students from the Aeronautical Engineering Department of MIST participated virtually in the 'Team Category,' presenting their project titled 'Construction of a Small Fixed-Wing UAV for Surveillance.' The team underwent a rigorous three-stage evaluation process, including abstract submission, report submission, and a final presentation. Competing against 47 participants from 12 countries, the MIST team delivered an outstanding performance and secured an impressive 2nd place. This achievement not only highlights the team's dedication and technical expertise but also brings pride to MIST, showcasing its commitment to excellence in aerospace innovation on an international stage.

## SPORTS AND CLUB ACTIVITIES

### INTER DEPARTMENT CRICKET COMPETITION - 2024



Inter Department Cricket Competition-2024 held in MIST Playground from 19 December 2024 to 02 January 2025 under the supervision of Directorate of Students' Welfare. 12 Departments of MIST have participated in the tournament. Major General Md Nasim Parvez, BSP, ndc, afwc, psc, Commandant of MIST was the Chief Guest of the final match and distributed the prizes among the winners. CE Department became the Champion and NAME Department became Runner-up of the tournament. Bulbul Hasan Ishan from NAME Department has become the Man of the Match. S. M. Nur-E-Elahi from NAME Department has become the Man of the Tournament. Munjimul Islam from NAME Department has become the Best Bowler and S.M. Sayed Hossen from EECE Department has become the Best Batsman. The Competition ended with the closing speech of chief guest.

### ORIENTATION PROGRAMME OF NEW BATCH - MIST INNOVATION CLUB



On 03 October 2024, the MIST Innovation Club (MIC) organized an orientation program for Level-1 students, under the supervision of the Research and Development Wing. The event aimed to introduce the new batch to the club's activities, vision and opportunities for innovation and creativity. Brigadier General Mohammad Sajjad Hossain, former Director of the Research and Development (R&D) Wing, graced the occasion as the chief guest. His presence added significant value to the programme, inspiring students to actively engage in the club's initiatives. The orientation served as a platform to familiarize the newcomers with MIC's mission and to encourage their participation in fostering a culture of innovation within the MIST community.

# SPORTS AND CLUB ACTIVITIES

## ENGINEERING PROJECT SHOWCASE (ASME)



The ASME (American Society of Mechanical Engineers) Student Section, established in June 2024, hosted its inaugural 'Engineering Project Showcase' on 03 October 2024 at the MIST Hall of Fame. The event was open to all MIST students and faculty members, attracting widespread appreciation for its organization and the innovative projects on display. This showcase provided an exceptional platform for participating students to demonstrate their technical expertise, creativity and innovative ideas. Attendees and faculty members lauded the projects, offering valuable feedback and encouragement to the participants. The event not only highlighted the students' depth of knowledge but also fostered a culture of innovation and collaboration within the MIST community.

## INTRA MIST MECHANICAL ENGINEERING OLYMPIAD



On 03 October 2024, the MOTO MIST Automotive Club, under the Mechanical Engineering (ME) Department, successfully organized the 'Intra MIST Mechanical Engineering Olympiad'. The competition welcomed participants from all departments of MIST, challenging them to showcase their expertise and knowledge in the field of Mechanical Engineering. The Olympiad provided a platform for students to demonstrate their technical skills and problem-solving abilities, fostering a spirit of healthy competition and academic excellence. Outstanding performers were recognized and awarded exciting prizes for their remarkable achievements. The event highlighted the collaborative and innovative spirit of the MIST community, further strengthening interdisciplinary learning and engagement.

## SPORTS AND CLUB ACTIVITIES

### INTER DEPARTMENT MATH OLYMPIAD - 2024



On 10 December 2024, the Science & Humanities Department successfully organized the Inter-Department Math Olympiad-2024. The event witnessed enthusiastic participation from twelve departments, highlighting the students' mathematical skills and competitive spirit. After a series of challenging rounds, 15 participants emerged victorious, securing top positions across various departments. The event was graced by the presence of Col Shirajul Islam Ukil, M.Phil, PhD, Head of the Department of Science and

Humanities, who served as the convener. His leadership and dedication ensured the seamless coordination and success of the competition. The Math Olympiad not only highlighted the academic excellence of the participants but also fostered a spirit of healthy competition and intellectual growth among the students.

### CAMPUS HOUR



On 03 October 2024, MIST organized its first Campus Hour of the academic year, transforming the campus into a vibrant hub of activities and camaraderie. Campus Hour was organized under the guidance of the Directorate of Students' Welfare Wing, the event saw enthusiastic participation from students across various clubs. This edition of Campus Hour featured a dynamic collaboration between the MIST Computer Club and the MIST Cyber Security Club, who organized engaging and interactive events designed to foster skill-building in a fun and supportive environment. The late afternoon session provided students with a perfect blend of learning and networking, encouraging both personal and academic growth. Overall, the Campus Hour aimed to create opportunities for students to enhance their academic, social and personal development, while strengthening the sense of community within the MIST campus.

## ARMED FORCES DAY-2024



On 21 November 2024, MIST observed Armed Forces Day, a significant occasion to honor the unwavering dedication and sacrifices of the nation's military personnel. The event was attended by all members of MIST and their families, who came together to pay tribute to the brave men and women serving in the armed forces. To commemorate this important day, MIST organized a series of events, including a special prayer, the hoisting of the national flag and a special Darbar. The celebration concluded with a Priti Bhoj, fostering a sense of unity and gratitude

among the attendees. The day served as a reminder of the courage and commitment of the armed forces in safeguarding the nation's sovereignty and peace.

## VICTORY DAY (BIJOY DIBOSH) - 2024

On 16 December 2024, MIST observed Victory Day, marking the 53<sup>rd</sup> anniversary of Bangladesh's independence. This day commemorates the end of a nine-month-long struggle that led to the creation of the new nation, Bangladesh. Victory Day is observed with deep national pride and solemnity, paying tribute to the sacrifices of freedom fighters and those who lost their lives during the war. To honor this historic occasion, MIST organized a special prayer, flag hoisting ceremony, and a Priti Bhoj. Major General Md Nasim Parvez, BSP, ndc, afwc, psc, Commandant, MIST along with all members of MIST, participated in the event.



## INAUGURATION OF THE NEWLY CONSTRUCTED PHYSIOTHERAPY CENTRE



On 21 November 2024, Major General Md Nasim Parvez, BSP, ndc, afwc, psc, Commandant of MIST, inaugurated the newly constructed Physiotherapy Centre under the supervision of the MIST Medical Centre. The inauguration ceremony was graced by the presence of Mrs. Sultana Dil Marufa, spouse of the Commandant, who joined in celebrating this remarkable addition to MIST's healthcare infrastructure. This state-of-the-art facility represents a significant milestone in healthcare development, providing advanced physical rehabilitation services.

The new Physiotherapy Centre is poised to enhance the quality of care and support for individuals in need of specialized rehabilitation services.

# INCOMING OFFICIALS



**BA-4275 Brig Gen Md Rosaidul Mawla, ndc, psc**  
Dir, R&D Wg  
Joined on 18-12-2024



**BA-5084 Brig Gen A N M Foyezur Rahman, ndc, psc**  
Head, CE & EWCE Dept  
Joined on 06-12-2024



**BA-5148 Brig Gen Mohammad Shahjahan Majib, ndu, psc**  
Dir ICT  
Joined on 17-10-2024



**BA-6020 Col Shirajul Islam Ukil, M Phil, PhD**  
Head, Sc & Hum Dept  
Joined on 30-10-2024



**BA-6109 Col Md Shahab Uddin, SGP, afwc, psc**  
Col Staff, MIST Sectt  
Joined on 25-12-2024



**PNo-1055 Capt Muhammed Tareq, (E), psc, BN**  
SI, NAME Dept  
Joined on 29-12-2024



**BA-6449 Lt Col Shahidullah-Al-Masum, psc, Engr**  
GSO-1, MIST Sectt  
Joined on 03-12-2024



**BA-9257 Lt Col Md. Mahbubar Rahman, PhD, Engr**  
Instr Cl A, Sc & Hum Dept  
Joined on 02-01-2025



**BA-6881 Lt Col Ferdousi Kashan, afwc, psc, Engr**  
Instr Cl A, CE Dept  
Joined on 24-12-2024



**BA-7075 Lt Col Md Abul Basar, psc, Sigs**  
Instr Cl A, CSE Dept  
Joined on 01-10-2024



**PNo-1725 Cdr Lutfunnahar, (Edn), BN**  
GSO-1, Aca Wg  
Joined on 02-12-2024



**BA-5674 Maj Golam Muhammed Russell, Engr**  
DAA & QMG, Admin Wg  
Joined on 01-01-2025



**BA-7779 Maj Shabrin Alam Asha, psc, Engr**  
Instr Cl B, EECE Dept & A/ GSO-2 (Mess)  
Joined on 17-12-2024



**BD/9861 Sqn Ldr Shahana Chowdhury, BPP, Engg**  
Instr Cl B, CSE Dept  
Joined on 01-01-2025



**BA-102496 Maj Sharmin Lubna, AMC**  
Medical Officer, Admin Wg  
Joined on 18-12-2024

# OUTGOING OFFICIALS



**BA-4009 Brig Gen Mohammad Sajjad Hossain**  
Dir, R&D Wg  
Departed on 30-12-2024



**BA-5672 Brig Gen Md Kabir Uddin Sikder, ndc, psc**  
Head, EWCE Dept  
Departed on 30-11-2024



**BA-4040 Col Molla Md Zubaer, SPP**  
Dir ICT  
Departed on 03-10-2024



**BA-4461 Col Nasir Uddin Ahmed**  
SI, CE Dept  
Departed on 20-11-2024



**BA-5502 Col Muntasir Mamun, psc**  
Dir Admin, Admin Wg  
Departed on 27-10-2024



**BA-5361 Col Eare Md Morshed Alam, M Phil, PhD**  
Head, Sc & Hum Dept  
Departed on 11-11-2024



**BA-101022 Lt Col Mohammad Mamun-Ur-Rashid,**  
SPP, MCPS, FCPS, AMC  
Medical Officer, Admin Wg  
Departed on 21-12-2024



**BA-6545 Lt Col Kazi Israt Zahan, psc**  
Instr CI A, CSE Dept  
Departed on 01-10-2024



**BA-6580 Lt Col Mosammat Sultana Razia, Engrs**  
GSO-1, DSW  
Departed on 04-10-2024



**PNo-1447 Cdr S M Fajlul Karim (C), BCGM, BN**  
GSO-1, Aca Wg  
Departed on 15-12-2024



**BA-6049 Maj Ahsan Kabir**  
DAA&QMG, Admin Wg  
Departed on 17-10-2024

# PUBLICATIONS

## JOURNAL ARTICLE

### CE DEPARTMENT

- Prof Dr. G M Jahid Hasan, along with three co-authors, published a journal article titled 'Bankline Assessment of Shibsas-Passur River by Satellite Imagery and Hydrodynamic Modeling using Delft3D' in MIJST on 26 December 2024.
- Prof Dr. G M Jahid Hasan, along with two co-authors, published a journal article titled 'Shoreline Evaluation and Morphological Trends of Swarnadwip Island through GIS Approaches and Digital Shoreline Analysis System' in Marine Geodesy, Publisher: Taylor and Francies, IF: 2.011 on 11 December 2024.
- Prof Dr. G M Jahid Hasan, along with another coauthor, published a journal article titled 'Mapping Vegetation Change and Cyclonic Effects along the Coastal Regions of Bangladesh: A Spatiotemporal Perspective' in Regional Studies in Marine Science (Publisher: Elsevier, IF: 2.0) on 20 November 2024.
- Prof Dr. Md Tauhid Ur Rahman published a journal article titled 'Assessment of Water Security Challenges in Hilly Terrain of Bangladesh: An Insight of Quantity and Quality concerns and Implementation of Effective Solutions' in Sustainable Water Resources Management, Springer, Volume 10, article number 153 (2024) Cite this article, IF 2.2, Q2.
- Lt Col Khondaker Sakil Ahmed, along with two co-authors, published a journal article titled 'Bond Behavior of Confined Rebar in Recycled Brick Aggregate Concrete Using Bending Pullout Test' in the International Journal Heliyon in October 2024.
- Lt Col Md. Jahidul Islam, PhD published a journal article titled 'Damage Assessment and Test Results of Construction Materials of a Fire-Damaged RC Building' in the Journal of Results in Engineering (Publisher: Elsevier, IF: 6.0) on 7 October 2024.
- Lt Col Md. Jahidul Islam, PhD published a journal article titled 'Influence of Galvanized Iron Fiber on Bond Behavior of Concrete' in Lecture Notes in Civil Engineering, Vol. 500, Serge Desjardins et al. (Eds): Proceedings of the Canadian Society for Civil Engineering Annual Conference 2023, Volume 6.
- Lt Col Md. Jahidul Islam, PhD published a Journal article titled 'Influence of Mechanical and Durability Properties of Concrete with Limestone Powder' in Lecture Notes in Civil Engineering, Vol. 500, Serge Desjardins et al. (Eds): Proceedings of the Canadian Society for Civil Engineering Annual Conference 2023, Volume 6.

### EECE DEPARTMENT

- Md Sawkat Ali, Rifat Ahmmad Rashid, Tasnim Hossain, Md Ahsan Kabir, Md Kamrul, Sayam Hossain Bhuiyan Aumy, Mehedi Hasan Mridha, Imam Hossain sajeeb, Mohammad Manzurul Islam, Taskeed Jabid published a Journal article titled 'A Comprehensive Dataset of Rice Field Weed Detection from Bangladesh' in Data in Brief, Elsevier, (Q2), (IF 1.0) in December 2024.
- Gourab Datta, Mohammad Jawad-Ul Kabir Chowdhury, S A Naimul Hoque, Md Aminul Islam published a Journal article titled 'Performance Analysis Of U-Net and Unetr for 2B Brats Within Consumer-Grade Hardware Limits' in International Artificial Intelligence and Data Processing Symposium on 17 October, 2024.

## PUBLICATIONS

### JOURNAL ARTICLE

#### BME DEPARTMENT

- Md Tanzim Rafat, Tanjim Zahin Shuchi, Md Enamul Hoque published a Journal article titled 'Polymer-Based Nanofluid Bio-Lubricants for Artificial Joints: Improving Wear Resistance and Reducing Friction' in the 'Hybrid Advances' on 06 December 2024.
- Farabi Hossain, Md Enamul Hoque published a Journal article titled 'Innovative Catalytic Systems Driving Sustainable Olefin Polymerization: Recent Advances and Green Chemistry Approaches' in the 'Polyolefins Journal' on 04 December 2024.
- ASM Mahadiuzzaman, Md Enamul Hoque, Shafiul Alam, Zarin Tasnim Chawdhury, Mohiuddin Hasan, Adib Bin Rashid published a Journal article titled 'Visual Neuroprostheses for Impaired Human Nervous System: State of the Art and Future Outlook' in International Journal of Cell Biology on 02 December 2024.
- Tasnia Nabi, Tanver Hasan Riyed, Akid Ornob published a Journal article titled 'Deep Learning Based Predictive Modeling to Screen Natural Compounds against TNF-alpha for the Potential Management of Rheumatoid Arthritis: Virtual Screening to comprehensive in Silico Investigation' in the Journal of PloS one 05 December 2024.
- Md. Asadur Rahman and three co-authors published a Journal article titled 'Detection and Blurring Bloodstained Violence Scene by Convolutional Neural Network Based Model for Media Platforms' in the journal of SN Computer Science.

#### Sc & Hum DEPARTMENT

- Yunus Ahmed, Tahmina Akter, Meherunnesa Prima, Keya Rani Dutta, Sanjida Mukut, Mohebul Ahsan, Md Mahbubur Rahman, M.K. Mohammad Ziaul Hyder, published a Journal article titled 'Advanced Ciprofloxacin Quantification: A Machine Learning and Metaheuristic Approach Using Ultrasensitive Chitosan-Gold Nanoparticle Based Electrochemical Sensor' in the Journal of Environmental Chemical Engineering, pp. 115094, 2024. DOI: 10.1016/j.jece.2024.115094.
- Md. Fahamidul Islam, Mohebul Ahsan, Md. Nurnobi Islam, Mohammad Imran Hossain, Newaz Mohammed Bahadur, Md. Abdul Aziz, Jehan Y. Al-Humaidi, Mohammed M. Rahman, T. Maiyalagan, Mohammad A. Hasnat published a Journal article titled 'Recent Advancements in Ascribing Several Platinum Free Electro-Catalysts Pertinent to Hydrogen Evolution from Water Reduction' in the Journal of Chemistry-An Asian , Vol. 19, e202400220, 2024. DOI: 10.1002/asia.202400220.

## PUBLICATIONS

### CONFERENCE PAPER

#### CE DEPARTMENT

- Prof Dr. G M Jahid Hasan along with two coauthors published a conference paper titled 'Turbidity and Suspended Sediment Concentration of two Major Rivers of Sundarbans Using Remote Sensing Techniques' in Regional Studies in Proceedings of the 7<sup>th</sup> International Conference on Advances in Civil Engineering (ICACE2024), CUET, Chattogram, 12 -14 December 2024.
- Prof Dr. Md Tauhid Ur Rahman published a conference paper titled 'Optimizing Agricultural Interfaces Along the Rural Urban Continuum in Coastal Bangladesh: Enhancing Sustainable Food Production and Promoting Resilient Urban Climate' in International Conference on Water Security and Climate Change, WSCC , 09 to 11 October, in Gießen , Germany. (Accepted for Presentation)
- Lt Col Khondaker Sakil Ahmed, along with 03 (three) coauthors published a conference paper titled 'Numerical Investigation for Lateral Capacity of Pre-Tensioned Spun Precast Concrete Pile to Pile Cap Joint' in conference proceedings of '7<sup>th</sup> International Conference on Advances in Civil Engineering (ICACE2024)' December 2024.
- Lt Col Khondaker Sakil Ahmed, along with 06 (six) co-authors published a conference paper titled 'Buckling Behaviour of Cold Formed Steel Omega( $\Omega$ )- Section Under Compression' in conference proceedings of '7<sup>th</sup> International Conference on Advances in Civil Engineering (ICACE2024)December 2024.
- Lt Col Khondaker Sakil Ahmed, along with 05 (five) co-authors published a conference paper titled 'Exploratory Study on Waste Ceramics as Coarse Aggregate In Concrete Production' in conference proceedings of '7<sup>th</sup> International Conference on Advances in Civil Engineering (ICACE2024)' December 2024.
- Lt Col Md. Jahidul Islam, PhD published a conference paper titled 'High Temperature Effect on Basalt Fiber Pellet Reinforced Cementitious Composites' in 7<sup>th</sup> International Conference on Advances in Civil Engineering (ICACE2024), 12-14 December 2024, CUET, Chattogram, Bangladesh.
- Lt Col Md. Jahidul Islam, PhD published a conference paper titled 'Tensile Strength Analysis of Carbon and Galvanized Iron Textile Reinforced Concrete' in 7<sup>th</sup> International Conference on Advances in Civil Engineering (ICACE2024), 12-14 December 2024, CUET, Chattogram, Bangladesh.
- Lt Col Md. Jahidul Islam, PhD published a conference paper titled 'Temperature Effect on Recycled Brick Aggregate Concrete with Rubber and Polypropylene Fiber' in 7<sup>th</sup> International Conference on Advances in Civil Engineering (ICACE2024), 12-14 December 2024, CUET, Chattogram, Bangladesh.

#### NAME DEPARTMENT

- Shahan Malek Usham, Muhammad Rabuil Islam published a conference paper titled 'Geometrical Effects of Printing Corrosion on Reliability of Unstiffened Ship Panel' in the 6<sup>th</sup> International Conference on Mechanical, Industrial and Materials Engineering 2024 on 11-13 December 2024, RUET, Rajshahi, Bangladesh.

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