THE World University Rankings 2026

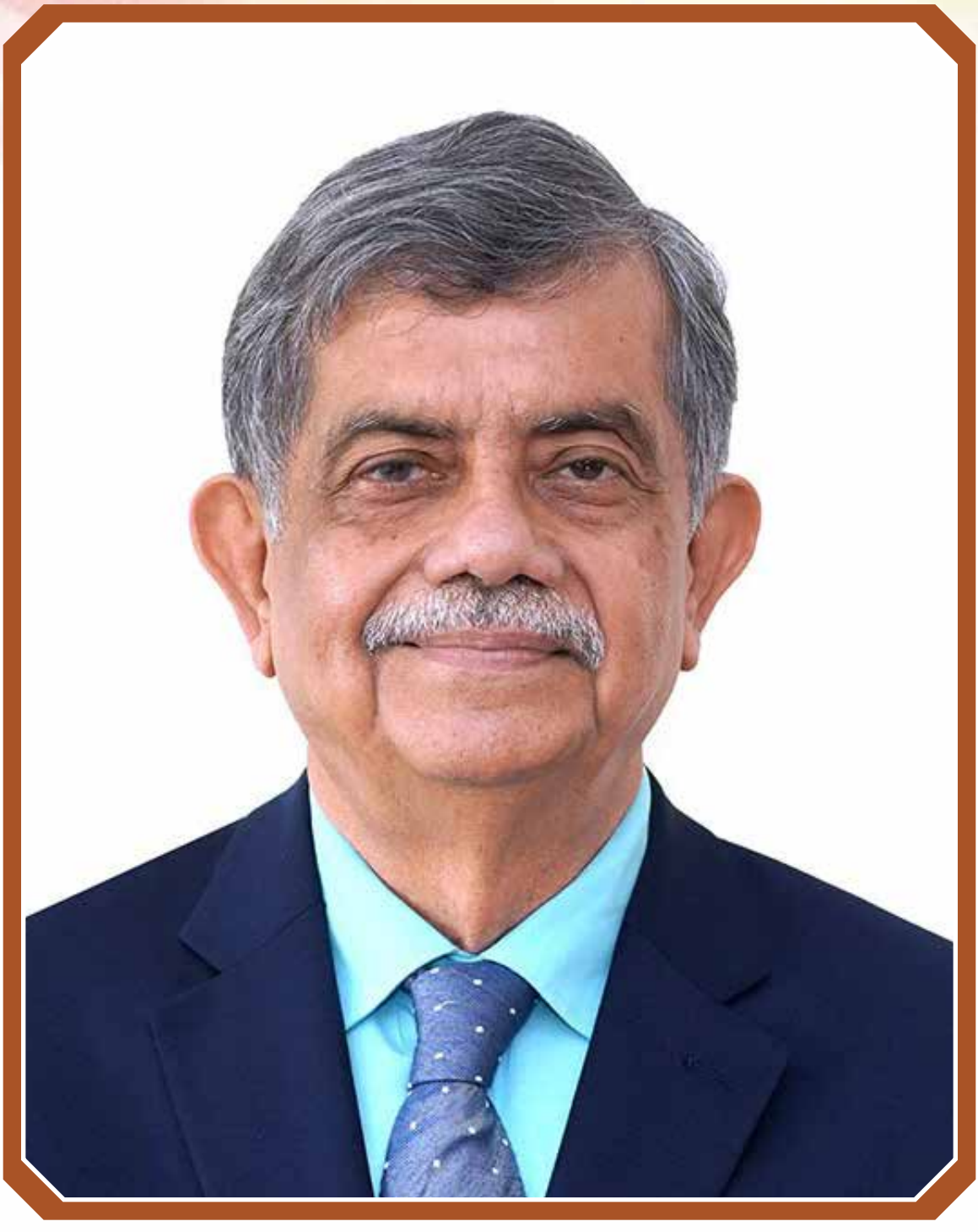
MIST Ranks (1501+) Globally

PROSPECTUS 2026

MILITARY INSTITUTE OF SCIENCE AND TECHNOLOGY, BANGLADESH

TECHNOLOGY FOR ADVANCEMENT

Dr. Muhammad Yunus
Chief Adviser
Government of the People's Republic of Bangladesh



Professor Dr. Chowdhury Rafiqul Abrar
Education Adviser
Government of the People's Republic of Bangladesh
Chairman, Council of MIST

General Waker-Uz-Zaman, SBP, OSP, SGP, psc
Chief of Army Staff
Vice Chairman, Council of MIST

Admiral M Nazmul Hassan, OSP, NPP, ndc, ncc, psc
Chief of Naval Staff
Vice Chairman, Council of MIST

Air Chief Marshal Hasan Mahmood Khan, BBP, OSP, GUP, nswc, psc
Chief of Air Staff, Bangladesh Air Force
Vice Chairman, Council of MIST

TABLE OF CONTENTS

FOREWORD

The Military Institute of Science and Technology (MIST) has stood as a beacon of academic excellence, discipline and innovation since its establishment on 19 April 1998. Guided by its founding vision "Centre of Excellence", this institute nurture future leader in science, engineering and technology. MIST has consistently expanded its academic horizons to meet the evolving needs of society and nation.

MIST provides excellence in education and research with 16 departments at present. This year marks another significant milestone in our academic journey. With the introduction of two faculties; Faculty of Architecture and Planning and Faculty of Science and Humanities and four departments; Department of Urban and Regional Planning, Department of Mathematics, Department of Chemistry and Department of Science and Humanities, MIST reaffirms its commitment to holistic education. These new departments will not only broaden the academic spectrum but also foster interdisciplinary learning and creativity among our undergraduate students.

The Prospectus-2026 is a guide and a gateway to opportunities. It reflects our motto, hallmarks. Objectives, affiliation, organogram, regulatory bodies, faculties/departments, seminar/workshop, curriculum/OBE, extra-curricular and club activities, achievements, MoU, student welfare including healthcare and counseling, rules/regulations, various policies etc. MIST as a whole creates a nurturing environment where students can research, innovate and contribute meaningfully to national development.

As we welcome new students, our mission remained steadfast: blend knowledge with values, discipline and creativity. I am sure that MIST will continue to inspire to shape the future..

Major General Md Nasim Parvez, BSP, ndc, afwc, psc
Chief Patron and Commandant, MIST


MIST

ABOUT MIST

Military Institute of Science and Technology (MIST) is the pioneering technical institute of Bangladesh Armed Forces, focusing on engineering education and research. As a Centre of Excellence, MIST aims to develop future leaders equipped with academic prowess, along with discipline, patriotism, and humanity. MIST began its journey on 19th April, 1998. The institution is led by Commandant, a Major General from Bangladesh Army. MIST is located in the northwest part of Dhaka City, at Mirpur Cantonment, which is well-known as the "Education Village" of Bangladesh Armed Forces.

The first academic program at MIST was launched on January 31, 1999, featuring the inaugural batch of Civil Engineering (CE). MIST was established under the supervision of the then Chief of Army Staff, General Muhammad Mustafizur Rahman, BirBikrom, ndc, psc, C, who was a visionary military leader with a keen interest in academic excellence of Bangladesh Army. The establishment of MIST stands as a testament to this commitment. MIST offers B.Sc., M.Sc., M.Engg and Ph.D. in Civil Engineering, Computer Science and Engineering, Electrical Electronic and Communication Engineering, Mechanical Engineering, Aeronautical Engineering, Naval Architecture and Marine Engineering, Nuclear Science and Engineering, and Biomedical Engineering. Additionally, this institution offers Ph.D and M.Phil degrees in the departments of Physics, Chemistry, and Mathematics under the faculty of Science & Engineering.

As an institution, MIST is steadily upholding its motto, **"Technology for Advancement,"** and remains committed to contributing to the wider spectrum of national educational arena. It plays a significant role in the development of human resources and is progressively working towards achieving its goal of being a **"Centre of Excellence."**

Since its inception, a total of 6,756 students have graduated from MIST, and they are demonstrating their worth in various sectors both at home and abroad with dignity and efficiency.

IMPORTANT INFORMATION

1. Major Academic Schedule (For Level-1 Only) - Tentative

- Term 1 (Spring Term) Class starts: 31 May 2026.
- Term 1 Final Examination: 20 September 2026.
- Term 2 (Fall Term) Class starts: 25 October 2026.
- Term 2 Final Examination: 21 February 2027.

2. Class Attendance

- Collegiate: Attendance 80% and above. Shall attend examination without fine.
- Non-Collegiate (NC): Attendance 80% to 65%. Can attend examination with fines.
- Dis-Collegiate (DC): Attendance below 65%. Cannot appear the examination. Need to re-take the course in the next suitable Term / year.

3. Term Registration Fee

- Pay all Registration fees in time. Otherwise penalty will be applied.
- Students are not allowed to attend classes without paying registration fees.

4. Admission Cancellation

- Within 2 Weeks of Academic Class: Full payment refund except Security Money (50,000 Tk).
- After 2 Weeks: No refund.
- Please do not deprive another student the opportunity of becoming an Engineer by pulling out and leaving the seat vacant.

5. Uniform

- Students are NOT allowed in the campus without uniform.
- Please get your uniform in time from Tailor Shop.

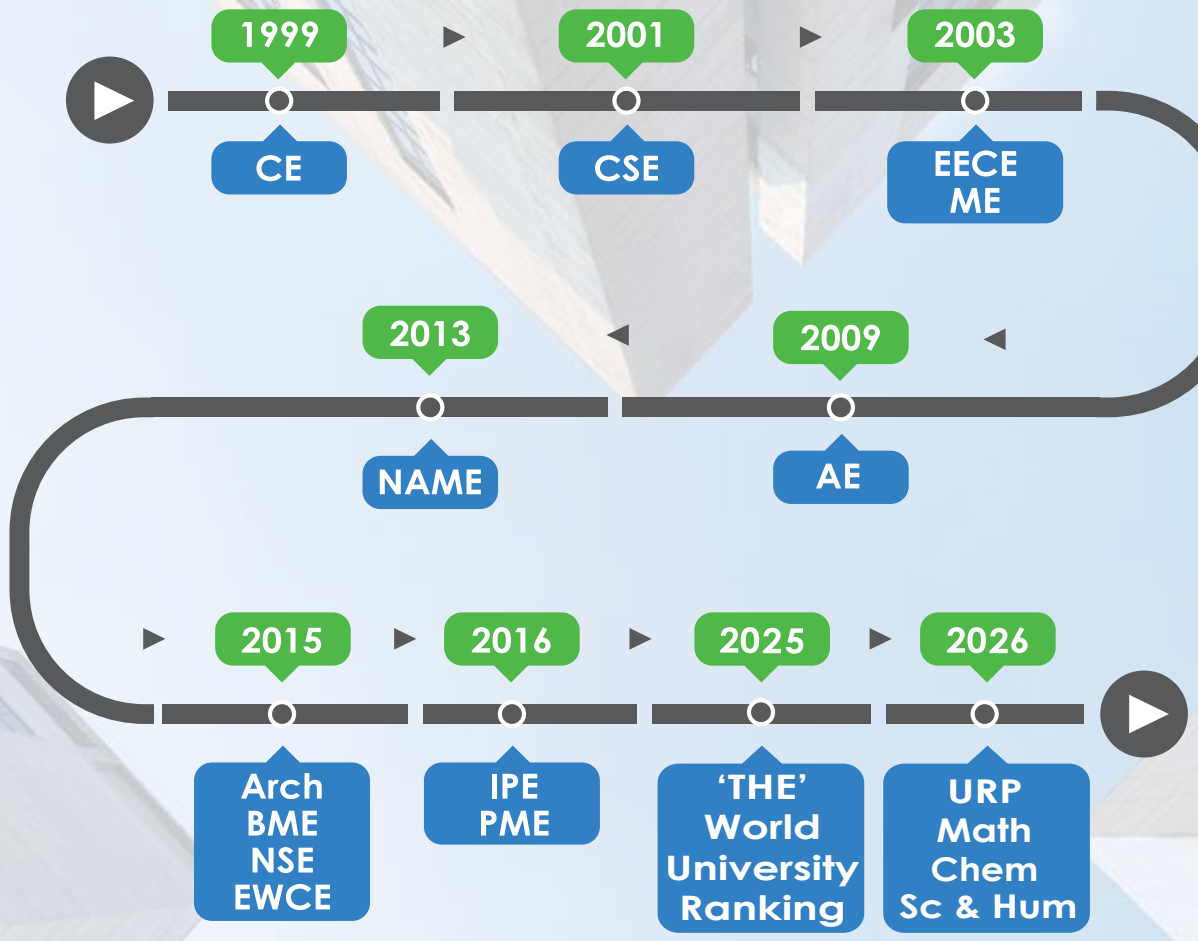
6. Exam Policy

- A student expected complete his/her graduation within 4 years in MIST. However, maximum duration for graduation is 6 academic years for Engineering and 7 years for Architecture degree.
- Minimum CGPA requirement for obtaining a Bachelor's Degree is 2.20. Failure to achieve this grade in two consecutive academic levels will lead to withdrawal from MIST.
- Any student obtained grade below 'B+' in a particular course, may appear the improvement examination of that course only once.
- Highest grade of Improvement/Supplementary examination will be 'B+'.
- Student is allowed to register for a maximum of two theory courses (Failed/ Improvement) in Supplementary-I and maximum of one theory course (Failed/ Improvement) in Supplementary-II.
- One student is allowed to appear at Improvement exam in 6 (six) courses in his whole graduation period.
- Read MIST Exam Policy very carefully.

7. Zero Tolerance

- MIST shows Zero Tolerance to Drugs, Ragging, Copying, Religious Extremism, Sexual Harassment and Eve-teasing.

Academic Milestones of MIST



CE	- Civil Engineering
CSE	- Computer Science and Engineering
EECE	- Electrical, Electronic and Communication Engineering
ME	- Mechanical Engineering
AE	- Aeronautical Engineering
NAME	- Naval Architecture and Marine Engineering
Arch	- Architecture
BME	- Biomedical Engineering
NSE	- Nuclear Science and Engineering
EWCE	- Environmental, Water Resources and Coastal Engineering
IPE	- Industrial and Production Engineering
PME	- Petroleum and Mining Engineering
URP	- Urban and Regional Planning
Math	- Mathematics
Chem	- Chemistry
Sc & Hum	- Science and Humanities
'THE'	- Times Higher Education is a UK Based Reputed World University Rankings, given to a University/ Institution for Research Enviroment, Research Quality, Industry and International Outlook. (University Ranks 1501+ Globally)

HALLMARKS OF MIST

- ✓ Rigorous admission and selection process for best possible screening.
- ✓ Interactive sessions in the classroom.
- ✓ Regular guest lectures and educational visits.
- ✓ Tradition of timeliness, commitment and uninterrupted curriculum.
- ✓ Well thought-out and continuous feedback and assessment system.
- ✓ Effective teaching through innovative methodologies.
- ✓ Industrial attachment for on-the-job training.
- ✓ Emphasis on code of conduct and dress code.
- ✓ Focus to develop students as good humans (with all possible attributes of a successful leader).
- ✓ Tranquil, pollution free and secure campus life.

OBJECTIVES

- ✓ To establish a prestigious academic institute for studies in different fields of engineering and technology for military personnel and civil students of home and abroad at graduate and post graduate levels.
- ✓ To organize courses on military science, technology and management in various area of interest.
- ✓ To hold examinations and confer certificates of diplomas/degrees, other academic distinctions to persons who have pursued a course of study and have passed examinations conducted by the institute.
- ✓ To confer degrees, award fellowship, scholarship, exhibition, prizes, medals and honorary degrees to persons who have carried out research works under conditions as prescribed in MIST regulations.
- ✓ To establish teaching divisions, departments, centres, faculties, labs, etc and to make necessary arrangements for their maintenance/management/administration.
- ✓ To make provisions for research, advisory, and consultation service including supervision, material testing, and to enter into suitable agreement with any persons/organizations for these purposes.
- ✓ To co-operate with Universities/ Technical Institutions (both military and civil) including memorandum of understanding (MoU) at home and abroad, in the manner and purpose as the institute may determine.
- ✓ To do such other acts, related to above-mentioned objectives, as may be required in order to expand the objectives of the institute.

CAPABILITIES

- ✓ To conduct under-graduate programs leading to B.Sc. Engineering Degrees in the following disciplines:
  - ❖ Civil Engineering (CE)
  - ❖ Computer Science and Engineering (CSE)
  - ❖ Electrical, Electronic and Communication Engineering (EECE)
  - ❖ Mechanical Engineering (ME)
  - ❖ Aeronautical Engineering (AE)
  - ❖ Naval Architecture and Marine Engineering (NAME)
  - ❖ Bachelor of Architecture (B. Arch)
  - ❖ Biomedical Engineering (BME)
  - ❖ Nuclear Science and Engineering (NSE)
  - ❖ Environmental, Water Resources and Coastal Engineering (EWCE)
  - ❖ Industrial and Production Engineering (IPE)
  - ❖ Petroleum and Mining Engineering (PME)
  - ❖ Urban and Regional Planning (URP)
  - ❖ Mathematics (Math)
  - ❖ Chemistry (Chem)
  - ❖ Science and Humanities (Sc & Hum)
- ✓ To conduct post graduate programs (masters and PhD)
- ✓ To conduct diploma and certificate programs in all the degree awarding disciplines

To conduct research and professional advanced programs / courses for Armed Forces in different fields of Military Science & Technology as requirement arises

AFFILIATION

All academic programs of MIST are affiliated with Bangladesh University of Professionals (BUP). All examinations are conducted as per the schedule approved by the same university. BUP also approves the results and awards certificates amongst the qualified students.

MIST Freshers' Day 2025 Hosted for Welcoming Academic Session 2024-2025

OUTCOME BASED EDUCATION (OBE)

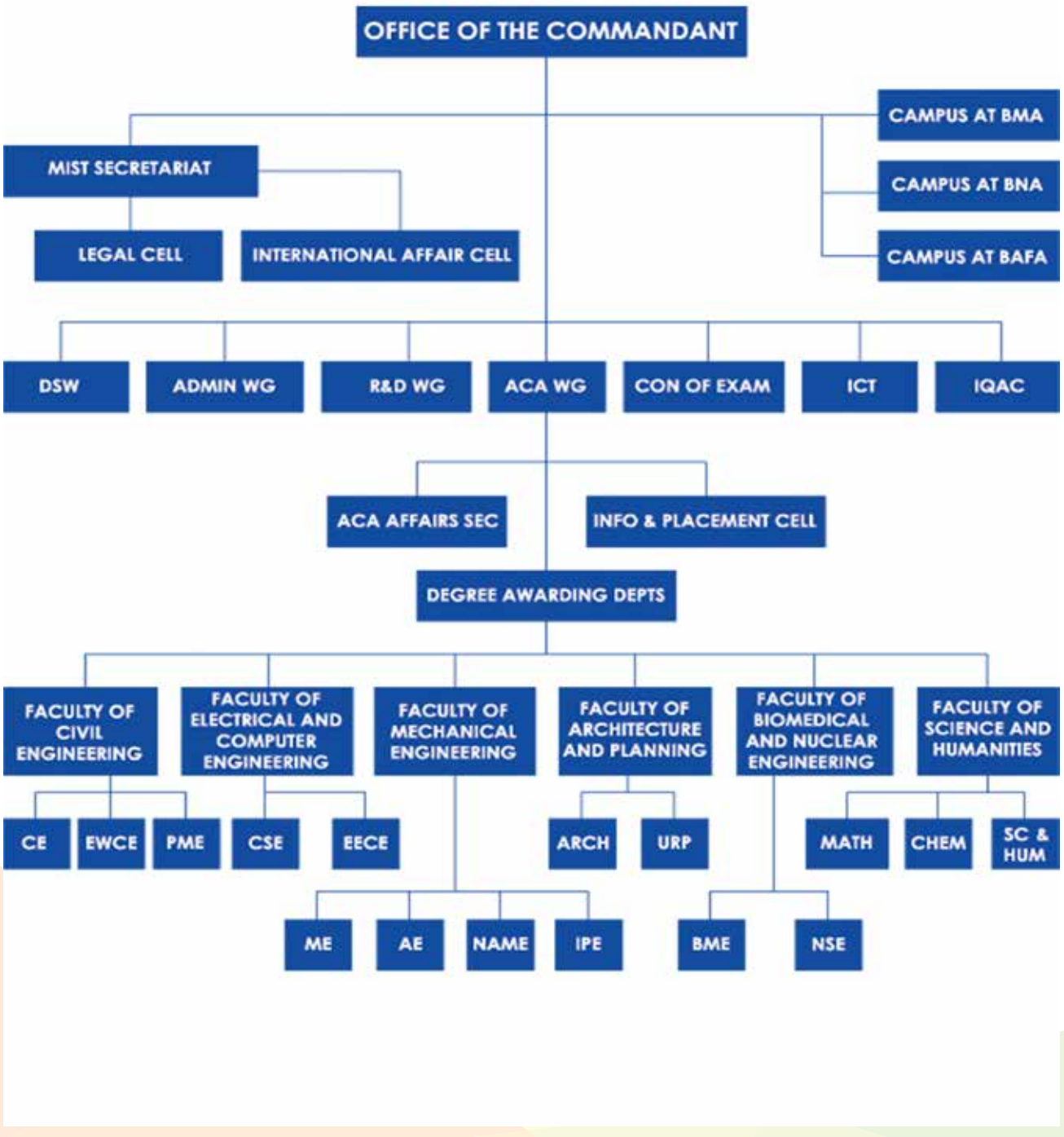
In its quest of reaching international level of accreditation, MIST has already adopted the Outcome Based Education (OBE) as per Washington Accord (An international accreditation agreement for professional engineering academic degrees between the bodies responsible for accreditation in its signatory countries, established in 1989, till date 20 countries are full signatories). Bangladesh represented by Board of Accreditation for Engineering and Technical Education (BAETE) has a provisional signatory status of Washington Accord. OBE is an educational theme based on each part of an educational system around goals (outcomes). By the end of the educational experience, each student should have achieved the goal. It is expected that graduates will be more relevant to industry and other stakeholders due to OBE system. Five programs of MIST, i.e. CE, EECE, ME, CSE, AE and NAME have already applied for accreditation as per OBE to BAETE. Process is going on. It is expected more than one program will get accreditation as per OBE system this year. Architecture Department has been granted a five-year nonconditional accreditation by the Institute of Architects Bangladesh (IAB) on February 2025.

Seminar on Outcome Based Education (OBE)

Visit of BAETE Evaluation Team for Accreditation NAME Department

ORGANOGRAM

MILITARY INSTITUTE OF SCIENCE AND TECHNOLOGY, BANGLADESH



FACULTIES AND DEPARTMENTS

At present MIST has 16 B.Sc engineering degree awarding departments under 06 faculties.

Faculty of Civil Engineering (FCE):

- Civil Engineering (CE)
- Environmental, Water Resources and Coastal Engineering (EWCE)
- Petroleum and Mining Engineering (PME)

Faculty of Electrical and Computer Engineering (FECE):

- Computer Science and Engineering (CSE)
- Electrical, Electronic and Communication Engineering (EECE)

Faculty of Mechanical Engineering (FME):

- Mechanical Engineering (ME)
- Aeronautical Engineering (AE)
- Naval Architecture and Marine Engineering (NAME)
- Industrial and Production Engineering (IPE)

Faculty of Biomedical and Nuclear Engineering

- Biomedical Engineering (BME)
- Nuclear Science and Engineering (NSE)

Faculty of Architecture and Planning (New)

- Architecture
- Urban and Regional Planning (New)

Faculty of Science and Humanities (New)

- Mathematics (New)
- Chemistry (New)
- Science and Humanities

FACULTY OF
CIVIL ENGINEERING (FCE)

Civil Engineering (CE) Department

The CE Department of MIST is built upon four core pillars: fundamentals, innovation, excellence, and progress. It holds the glory of being the pioneer department of MIST. The department of CE produces next-generation top-notch engineers and leaders for the nation. Since its commencement in 1999 with only 40 military students, thousands of students have graduated from this department. Presently 404 students are enrolled in the undergraduate program of this department. It is the first ever department of MIST to receive the accreditation from the Board of Accreditation for Engineering and Technical Education (BAETE) in 2008. This department has again pioneered the Post Graduate program by introducing the MSc/M.Engg and PhD in 2012 and 2013, respectively. This department is enriched with highly experienced and disciplined teaching staffs. At present, 40 faculties are serving in this department. This department highly promotes interactive learning and collective class environment which help the students become more engrossed in employing themselves with the subject-matter and develop their depth of knowledge in engineering education. This department also contributes to the country's infrastructural development. Many important construction works, projects and professional vetting works in the field of structural, geotechnical, transportation and environmental engineering are carried out with the consultancy service of this department. All-in-all, within a very short span of time, the CE department of MIST has spread its outreach throughout the nation and is playing a vital role in building an ingenious society enriched with engineering transcendence and revolution.

With highly motivated faculty members, the research environment in the CE department is dynamic and collaborative. Expert members in their respective fields are playing key roles in developing students' knowledge and skills. With over 350 conference papers and 250 journal publications since 2020, students and faculties of CE department are actively present in the CE research arena, having a global footprint to include countries like the USA, Canada, Singapore, India to name a few. Besides, collaboration research with BUET-JIDPUS and many consultancy projects were done successfully. CE department signed MoU with WaterAid Bangladesh in 2015 for promoting urban rainwater harvesting and Ohio State University, USA in 2016 for the higher education program and joint research work. In February 2021, MIST signed MoU with Lakehead University, Canada.A MoU has been signed between GPH Ispat and the Military Institute of Science and Technology (MIST) on 8th February 2023. In July 2023, MIST established an MoU with the University of Texas at Arlington, USA.

Board of Accreditation for Engineering and Technical Education, Bangladesh

Certificate

This is to certify that the Bachelor of Science in Civil Engineering (BSc in CE) degree program (daytime) of Military Institute of Science and Technology (MIST), Mirpur Cantonment, Dhaka-1216, Bangladesh has been reviewed by the Board of Accreditation for Engineering and Technical Education as per BAETE Manual (Version 2.1, 2022). The Board therefore accredits this program with all the privileges attached to it for a period of four years with effect from 24 January 2023.

Professor Kazi Reyzid Kabir
Member-Secretary, BAETE

Institution of Engineers, Bangladesh (IEB)
Headquarters, Ramna, Dhaka, Bangladesh

Professor AFM Saiful Amin
Chairman, BAETE

Environmental, Water Resources and Coastal Engineering (EWCE) Department

Environmental, Water Resources and Coastal Engineering (EWCE) department began its journey in 2015 with 42 students with a commitment to promote quality education, research, expertise, and innovation in civil, environmental, water resources and coastal engineering for achieving sustainable development in Bangladesh. By offering two undergraduate programs - B.Sc. in Civil and Environmental Engineering and B.Sc. in Civil and Water Resources Engineering, the department has grown significantly over the years. Till date, 294 students have graduated and pursuing higher studies in home and abroad as well as contributing professionally into various sectors of civil, environmental, water resources and coastal engineering.

The mission of EWCE department is deeply aligned with global environmental and sustainable development goals. Over the years, the department has evolved through incorporating cutting-edge technologies and advanced research projects to solve the national and international issues. EWCE department is enriched with a number of qualified faculties, well equipped laboratory facilities and interactive classroom environment, which enhances higher student engagement with engineering education. This department has two specialized laboratories: Environmental Engineering Lab and Water Resources Engineering Lab in addition to labs on Structural Mechanics, Concrete, Geotechnical Engineering, Transportation Engineering and GIS. These lab facilities serve as the hubs for hands-on training and research, enabling students and faculties to explore deeper into the practical aspects of engineering fields.

The department is also engaged in consultancy services through Center for Advisory and Testing Services (CATS-EWCE) and contributes to national development. In 2023, a research center, namely Center for Environmental and Water Management (CEWM) was established in line with the vision of Bangladesh Delta Plan 2030. This addition marked a strategic move towards the department's research endeavors, facilitating advanced studies, and fostering innovation in civil, environment and water management practices.

Petroleum and Mining Engineering (PME) Department

The Department of Petroleum and Mining Engineering (PME) offers Bachelor of Science in Petroleum and Mining Engineering which is one of the top university level programs among the engineering universities in Bangladesh. The Department of Petroleum and Mining Engineering started its academic work from 3 February 2016 with the objective to produce qualified personnel in the field of Petroleum and Mining Engineering, skilled enough to exploit the resources in sustainable manner in national and international context.

The mission of the department of Petroleum and Mining Engineering is to guide all efforts aiming to build, sustain, incorporate, convey and apply Petroleum and Mining Engineering knowledge, and to augment the human resources of these disciplines and thus to ensure an energy-secure future for the nation, that balances environmental impact and affordable energy supply. To foster an environment in which students learn to think, conduct, research, apply knowledge and achieve success in a diverse and changing global economy, and to guide the students to develop themselves as professionals with high ethical and moral values.

To fulfill this mission, the PME department committed to pursue excellence in Reservoir Engineering, Production Engineering, Well Drilling and Completions, Integrated Reservoir Characterization, Fit-for-purpose Reservoir Management Techniques, Rock Mechanics, Mining System, Mine Instrumentation and Machineries, Minerals Processing, Mining Survey, Mine Ventilation and Environmental Engineering considering sustainable resource engineering.

The department of Petroleum and Mining Engineering intends to be nationally and internationally recognized through education and research programs in both Petroleum and Mining discipline. The vision is to enrich the national and global energy industry by applying fundamental engineering and scientific knowledge accompanied by the latest innovation into industry applications.

FACULTY OF ELECTRICAL AND COMPUTER ENGINEERING (FECE)

Computer Science and Engineering (CSE) Department

The Department of Computer Science and Engineering (CSE) was established in the academic session 2000-2001 as CSIT. From a modest beginning, offering undergraduate B.Sc. program exclusively to military students, the department has now evolved as one of the prominent departments at MIST. The Department of CSE currently offers B.Sc. program at the undergraduate level, along with M.Sc., M.Engg, and Doctor of Philosophy (Ph.D.) degrees at the postgraduate level. The department boasts highly qualified faculty members and state-of-the-art learning infrastructure, providing an ideal platform for students to refine their skills in the field of Computer Science and Engineering. Students can specialize in contemporary fields such as Artificial Intelligence, Robotics, Machine Learning, Computer Vision, Pattern Recognition, Data Analytics, and Network & Data Security to name a few. The department also collaborates with industry and government agencies to establish leadership that benefits all stakeholders, especially students.

Modern facilities include specialized software and hardware labs such as the Intelligent Computing Laboratory, Cyber Range, Artificial Intelligence Laboratory, and Microprocessor & Microcontroller Laboratory are designed to meet cutting-edge academic and research needs. This diversity of advanced labs enables students to gain hands-on experience in areas like core programming, IoT, cyber security, multimedia, software testing, database management systems and human-computer interaction.

Its strength lies in the experienced pool of highly professional faculty members with diverse backgrounds, including prior exposure to military, industrial, and academic sectors, as well as varied educational qualifications. This diversity ensures a broad spectrum of expertise for students to leverage for their academic and professional growth.

Board of Accreditation for Engineering and Technical Education, Bangladesh

Certificate

This is to certify that the Bachelor of Science in Computer Science and Engineering (BSc in CSE) degree program (daytime) of Military Institute of Science and Technology (MIST), Mirpur Cantonment, Dhaka-1216, Bangladesh has been reviewed by the Board of Accreditation for Engineering and Technical Education as per BAETE Manual (Version 2.1, 2022). The Board therefore accredits this program with all the privileges attached to it for a period of four years with effect from 01 December 2023.

Electrical, Electronic and Communication Engineering (EECE) Department

The foundation of EECE department was laid in 2003. It is functioning under the faculty of Electrical and Computer Engineering. The department is offering both undergraduate and postgraduate programs on M.Sc., M Engg and PhD. The department is subdivided into three major areas: Power, Electronics and Communication in the graduate and undergraduate curriculum. At present this department is served by a group of competent, qualified faculty members along with several renowned professors from BUET as guest faculty. Around 302 undergraduate and 100 postgraduate students are currently studying in the department. It offers a diverse education experience with a focus on traditional areas as well as emerging areas. The faculty members are always engaged in numerous research areas including satellite navigation space engineering, VLSI, optoelectronics, properties of materials, compound semiconductor devices, radar detection and tracking, optical fiber communication, free space optical communication, wired and wireless communication, renewable energy and thin film technology. At present, there are 34 faculty members in the department. The department frequently arranges international conferences, seminars and project competitions to enhance the knowledge of the students. The students of this department participate in various national and international competitions throughout the year. Under this department, MIST Robotics Club (MRC) and IEEE Student Branch are performing in the national and international platform. The department got accreditation from BAETE in September 2010. Post graduate program under this department has started functioning since October 2013.

Board of Accreditation for Engineering and Technical Education, Bangladesh

Certificate

This is to certify that the Bachelor of Science in Electrical, Electronic and Communication Engineering (BSc in EECE) degree program (daytime) of Military Institute of Science and Technology (MIST), Mirpur Cantonment, Dhaka-1216, Bangladesh has been reviewed by the Board of Accreditation for Engineering and Technical Education as per BAETE Manual (Version 1, 2017). The Board therefore accredits this program with all the privileges attached to it for a period of three years with effect from 01 July 2022.

FACULTY OF MECHANICAL ENGINEERING (FME)

Mechanical Engineering (ME) Department

The Department of Mechanical Engineering is one of the four fundamental departments of MIST. Having started its journey on January 2003, the department has progressed rapidly to establish its legacy in producing talented and high achieving engineering graduates. Till date it has produced over thousand graduates with currently having 436 undergraduate and 60 postgraduate (Master's 55, PhD 5) students enrolled.

The department is highly committed to impart quality education aligning with the demand of 4th Industrial Revolution and Artificial Intelligence era. A periodic review of syllabus, healthy connection with industry leaderships and hands on teaching method ensure the students can keep pace with dynamic technological advancements. The highly qualified faculty members coming from the background of academic and military service, provide an unique combination of knowledge, experience and leadership. The students not only receive the academic teaching but also earn the teaching post academic life. The state of the art laboratories such as Machine Tools, Automobile, Fluid Mechanics, Heat Transfer, Applied Mechanics, CAD Lab and Thermodynamics are the biggest strength of ME Department. The advanced labs like, Robotics and Control lab and Composite Materials lab are on the way of establishment which will build the students for future challenges.

The students have shown excellent performance in extra curricular activities. ME Dept holds the pride to be in the front runner in all extra curricular competitions be it football, cricket volleyball, debate or cultural. They participated in different national and international competitions and received prestigious recognitions. 'MIST Blitz' a group of enthusiastic and diligent students participated in "Formula Student China" in Zengzhou, China in 08-12 October 2025 where they were crowned as 'Best Foreign Team' and 'Best Presentation' awards despite participating in the competition for the very first time. ME Dept hosts international and national conferences regularly. The 3rd ICMEAS was held on 17-19 July 2025 were scholars, researchers and academics from 12 different countries participated and presented papers. The department always thrives excellence in engineering through innovation and education.

Board of Accreditation for Engineering and Technical Education, Bangladesh

Certificate

This is to certify that the Bachelor of Science in Mechanical Engineering (BSc in ME) degree program (daytime) of Military Institute of Science and Technology (MIST), Mirpur Cantonment, Dhaka-1216, Bangladesh has been reviewed by the Board of Accreditation for Engineering and Technical Education as per BAETE Manual (Version 1, 2017). The Board therefore accredits this program with all the privileges attached to it for a period of three years with effect from 01 July 2022.

Professor Kazi Bayzid Kabir
Member-Secretary, BAETE

Institution of Engineers, Bangladesh (IEB)
Headquarters, Ramna, Dhaka, Bangladesh

Professor AFM Saiful Amin
Acting Chairman, BAETE

Aeronautical Engineering (AE) Department

Aeronautical Engineering (AE) department of MIST has started its journey from 1st February 2009. The department is currently offering B.Sc., M.Sc. and PhD in AE program. The aim of AE Department is to provide students with the knowledge of Aerodynamics, Aerospace Propulsion, Aircraft Loading & Structural Analysis, Aerospace Vehicle Design and Space Engineering. The department has two major divisions: Aerospace and Avionics. Currently the department is running its 17th batch with a total of 208 students (including 02 foreign students) in four levels, alongside successful graduation of 13 batches of 703 students. Total 27 faculty members specialized from different backgrounds (both civil & military) are serving in this department.

A significant number of AE graduates are pursuing higher studies abroad in USA, Canada, Germany and other countries. In professional fields, AE Graduates are employed in Airlines, Corporate Sector, Public Sector and Armed Forces both in home and abroad.

AE department has participated and achieved success in many international competitions like: NASA Lunabotics Mining Competition (USA), DBF Competition (USA), SAE Aero-design competition (USA), Future Flight Design. The Department organized the 1st National Aero Design Competition in 2014 which is a milestone in the Aviation Landscape in Bangladesh.

At present, the AE Department actively undertakes research and development (R&D) projects on Unmanned Aerial Vehicles The Department also regularly organizes enlightening workshops, seminars (conducted by alumni and industry professionals), webinars, and specialized short courses, particularly focused on Aerospace and Avionics technology.

The Board of Accreditation for Engineering & Technical Education (BAETE) accredited Aeronautical Engineering program of MIST in 2016 and subsequently renewed in 2022 according to Outcome Based Education (OBE).

Board of Accreditation for Engineering and Technical Education, Bangladesh

Certificate

This is to certify that the Bachelor of Science in Aeronautical Engineering (BSc in AE) degree program (daytime) of Military Institute of Science and Technology (MIST), Mirpur Cantonment, Dhaka-1216, Bangladesh has been reviewed by the Board of Accreditation for Engineering and Technical Education as per BAETE Manual (Version 1, 2017). The Board therefore accredits this program with all the privileges attached to it for a period of three years with effect from 01 July 2022.

Professor Kazi Bayzid Kabir
Member-Secretary, BAETE

Institution of Engineers, Bangladesh (IEB)
Headquarters, Ramna, Dhaka, Bangladesh

Professor AFM Saiful Amin
Acting Chairman, BAETE

Naval Architecture and Marine Engineering (NAME) Department

Divine blessings of 1,10,000 sq km exclusive economic zone, 712 km coastlines and 700 rivers necessitate Bangladesh to have close relation to shipping and shipbuilding. Moreover, the Government of Bangladesh has declared shipbuilding as "The Thrust" sector for national economic development and industrialization. Thus, with the aim to produce human resources qualified with design, construction, repair and maintenance of ships and offshore structures, Department of Naval Architecture and Marine Engineering at MIST started its journey under the faculty of Mechanical Engineering with undergraduate program in the academic session 2012-2013. The department has also started postgraduate program i.e. M.Sc. (Engg), M.Engg, Ph.D. from the year 2019-2020.

A career in naval architecture and marine engineering is very exciting, challenging and rewarding. Graduates in this field of study have actually dual degrees. In one way these graduates are naval architects and another way they are marine engineers. The curriculum of the department provides insight into design, to build, to operate and to maintain vessels which move just above, on or under the sea. These include bulk carriers, tankers, container ships, passenger ferries, battleships, aircraft carriers, submarines, drilling platforms, hovercraft, yachts, and many other kinds of vessels. The Dept of NAME draws its strength from the experienced pool of highly professional faculties. The department is a home to more than 40 instrument facilities and laboratories, led by our faculty in the field of engineering and applied sciences. The instrument facilities and laboratories are available to our faculty, research staff, graduate and undergraduate students. In addition, the department organizes various seminars, webinars, project competitions, and short courses to enhance the knowledge of the students. Besides, as part of the accreditation process, an evaluation team conducted an official visit to the Department of Naval Architecture and Marine Engineering (NAME) from 15 to 17 May, 2025. Presently, the department is waiting for evaluation report from the BAETE authority.

So far, a total of 320 students have graduated from NAME Department. Due to versatility of the field of study, the graduates could successfully grab the opportunity of wide range of employment and research at home and abroad. At present, a good number of graduates of this department are working in various government and private organizations.

Industrial and Production Engineering (IPE) Department

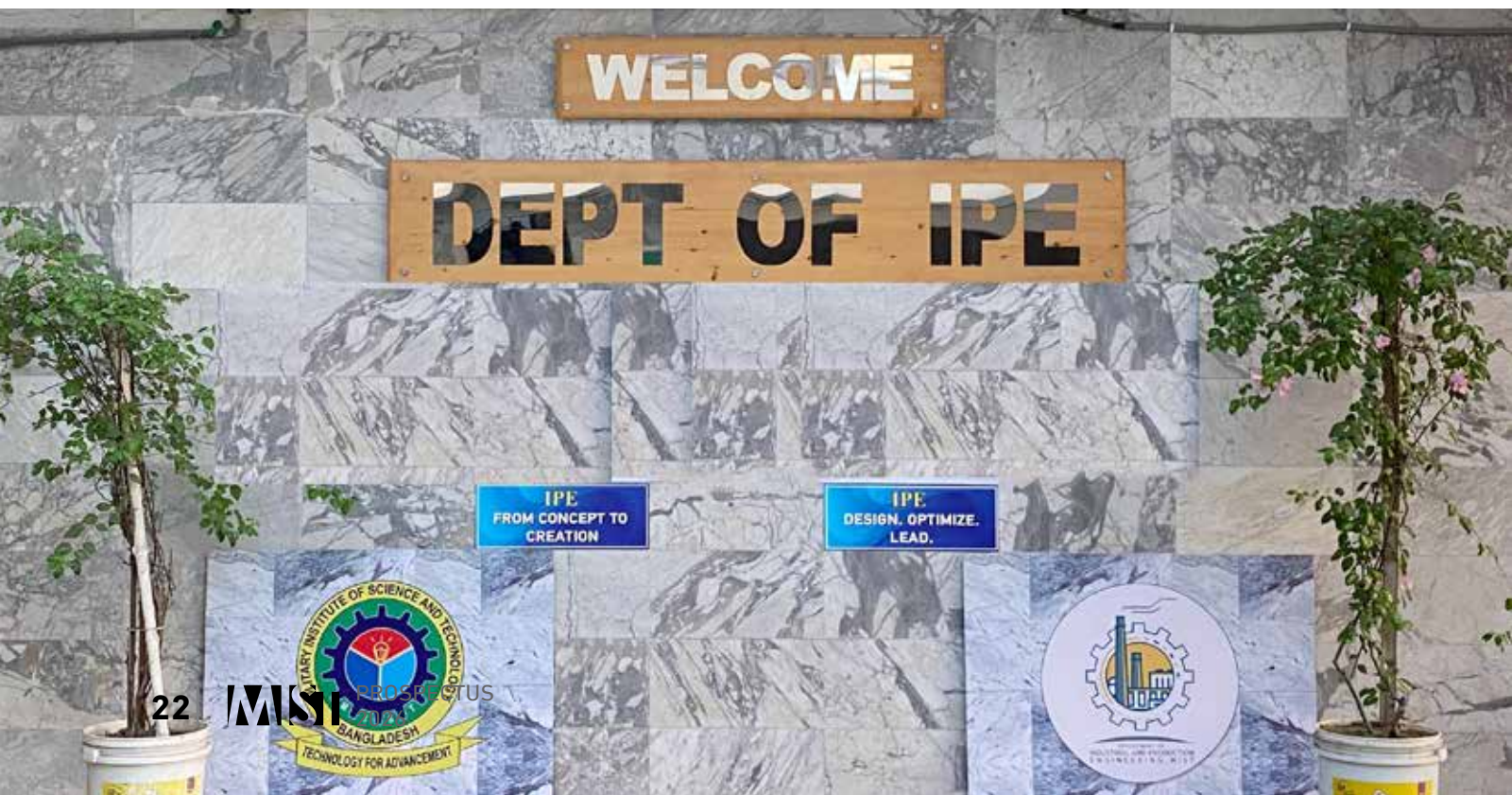
Established in 2016 under the Faculty of Mechanical Engineering, the Department of Industrial and Production Engineering (IPE) continues to evolve to meet the demands of modern industries. The undergraduate program is designed with a strong emphasis on manufacturing, process optimization, quality assurance, industrial automation, and productivity enhancement.

Our curriculum bridges theoretical knowledge with real-world applications, fostering close collaborations with industries through curriculum development, industrial visits, student projects, and technical seminars. By integrating Industry 4.0 concepts such as Computer Integrated Manufacturing (CIM), Industrial Automation, and Supervisory Control and Data Acquisition (SCADA), we equip students with cutting-edge technological expertise.

The department houses state-of-the-art laboratories, including the Advanced Machine Tools and Production Process Lab, Industrial Automation Lab, and Ergonomics & Safety Lab. Our research activities span multiple areas of Industrial Engineering, including supply chain optimization, lean manufacturing, sustainable production, and human factors engineering. Faculty members and students actively engage in research projects that address real-world industrial challenges, driving innovation in production efficiency and smart manufacturing.

Beyond academics, the department promotes entrepreneurial thinking and technical excellence. Students have earned recognition in national and international competitions, including 1st Prize at the 6th IEOM Bangladesh Conference (2023) and the Best Paper Award at the IEEE International Conference on Service Operations and Logistics (2021). These achievements reflect IPE's commitment to nurturing future leaders and innovators.

With a vision to become a center of excellence in industrial engineering education and research, the Department of Industrial and Production Engineering continues to evolve, equipping students with the skills and knowledge required to excel in industrial innovation, technology development, and sustainable manufacturing at both national and global levels.



FACULTY OF
BIOMEDICAL AND NUCLEAR ENGINEERING

Biomedical Engineering (BME) Department

The Department of Biomedical Engineering at MIST, the pioneer in Biomedical Engineering education in Bangladesh, was established in 2014, with the B.Sc. program commencing on February 1, 2015, with 41 students. This department also launched its postgraduate program, attracting notable students in 2015. The vision of the Department of Biomedical Engineering is to be a center of excellence, providing advanced quality education in science, engineering, and technology, and developing diverse, high-quality leaders and professions, and conducting innovative research that addresses national and global needs and challenges, advancing cutting-edge healthcare technologies. The program has the following objectives:

a) To prepare students to contribute to Biomedical Engineering research and advancements
b) To empower students to develop medical technologies for diagnosis & treatment enhancing human health
c) To maintain innovative, up-to-date, internationally recognized academic programs that meet national and international standards
d) To equip students to meet the growing demand for biomedical engineers both domestically and internationally
e) To foster academic and industry partnerships through collaborative research

The undergraduate program in BME provides a strong foundation in the basic sciences, mathematics, engineering, and life sciences. This department facilitates nine (9) state-of-the-art laboratories to support advanced education and research. The program includes six major tracks: Biomaterials, Bioinstrumentation, Medical Imaging, Biomechanics, Rehabilitation Engineering, and Cell and Tissue Engineering.

Biomedical Research and Innovation Center (BRIC) has been established at BME Department. At present BRIC acts as a Clinical Research Organization (CRO) approved by Directorate General of Drug Administration (DGDA) in 2025 to conduct clinical trials and validation of drugs, diagnostic kits and type testing of medical devices. Now BRIC is engaged in testing, training, clinical trial, validation and research and development.

This field of engineering bridges the gap between Engineering and Medicine by integrating design and problem-solving skills with medical and biological sciences, aiming to advance healthcare through improved diagnosis, observation, and therapy.

Nuclear Science and Engineering (NSE) Department

To meet the challenges of the twenty-first century and advance Bangladesh in line with the government's aim for clean energy, the role of Nuclear Science and Engineering department will be vital. Bangladesh is now making gradual progress towards incorporating nuclear technology in producing power, medicine, industrial, and agricultural products, among other things. The country has long felt the need for professionals to take care of the nuclear infrastructure, nuclear power plant components, nuclear fuel, and other radioactive materials, particularly for power generation and healthcare diagnostics, and to integrate the most recent technology effectively for quality citizen services. The foundation of nuclear education results from this endeavor to suit the necessities of the time.

To realize novel and advantageous applications of nuclear science and technology is one of the main objectives of the Nuclear Science and Engineering (NSE) Department. Our students will learn about contemporary nuclear techniques and their uses in fields like radiation therapy, medical imaging, contraband detection, and nuclear security and safety. Our nuclear engineers are working for nuclear power plants, other power companies, nuclear medicine institutes, research facilities, and international governmental regulatory organizations.

These considerations led to the establishment of the NSE Department in 2014, and the first academic year at the Military Institute of Science and Technology (MIST) began on February 5th, 2015. The first batch had 40 undergraduate students. MSc, MEngg, and PhD programs also started at the NSE Department as of the October 2015 session.

FACULTY OF
ARCHITECTURE AND PLANNING

Architecture (Arch) Department

The Department of Architecture in MIST started its journey in 2015. The department aims to educate and develop the future professional architects with advanced knowledge, technical competence, design skill and complex-problem solving ability steered by core values of critical thinking, intellectual curiosity, discipline and ethics. In this respect, it offers a learning environment that involves the students to nurture their intellectual ability, expand the knowledge horizon, develop high technical competence and design skill that they can apply in education, profession and life.

Students can avail the facilities to work collaboratively with tutors, internal and external practitioners, theorists and designers in order to enhance their skills and build knowledge. The studios of the department are equipped with all modern amenities and the department is in its way to augment Lab facilities including Architectural Design Lab, Building Technology Lab, Photography & Digital Image Lab, Design Communication & Visualization Lab, Model Making Lab, Urban & Landscape Design Lab, Heritage Conservation & Rebuilding Lab and Environmental Design Lab. Along with the consistent academic activities, other co-curricular programs such as exhibition, seminar, design charrette, workshop, guest lecture, excursion etc. are arranged by the department regularly.

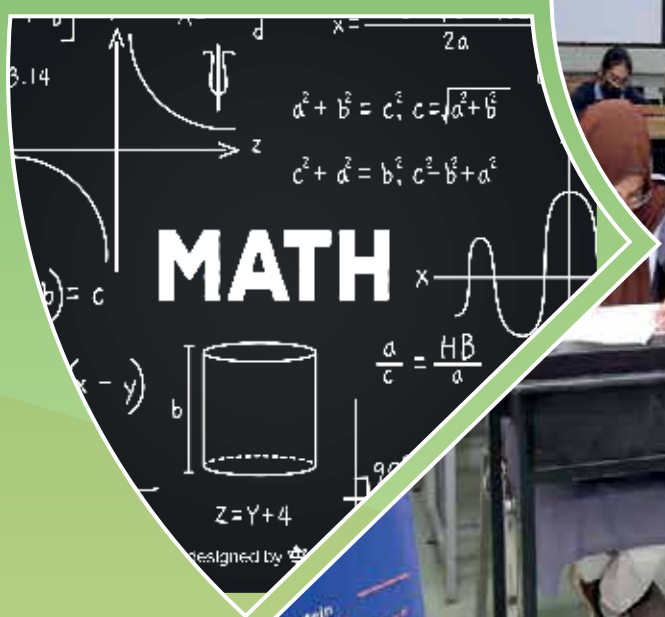
The architecture program is accredited by the Institute of Architects (IAB) and equipped with highly qualified faculty members. The faculty contains members with Doctorate and Master's from reputed foreign and local universities along with a combination of experienced and young energetic members. Moreover, there is a strong advisory committee that supports the department in maintaining academic standards through regular monitoring and evaluation of the academic activities. Every year, the department organizes industrial training which enables the students to work under renowned professionals and orient with the professional field. In addition, the department maintains close ties with the alumni who are engaged in different sectors- from private to pubic and research to practice, in various local organizations and international institutions.

Urban and Regional Planning Department

Urban and Regional Planning education is an academic pursuit that involves learning by rational thinking and experiencing the built environment. Grounded in a multidisciplinary structure, the Department of Urban and Regional Planning of MIST offers a 4-year Bachelor of Urban and Regional Planning (BURP) program. The BURP Program at MIST emphasizes a supportive studio culture through facilitated peer teaching and teamwork. The department encourages intellectual inquiry as the basis for forging an individual planning path. The department's philosophy of planning excellence integrates the ability to draw inspiration from a broad spectrum of knowledge. The BURP curriculum includes studio, theory, lab-based learning and professional practice, with urban and Regional Planning as the central focus of instruction. URP faculty and students will explore a range of design investigations, expand knowledge and confront the challenges of the contemporary built environment.

The creative and collaborative atmosphere of the department will enable URP students to develop, discuss, exchange, and materialize ideas through a comprehensive range of platforms and processes that will be further enriched by the department's parallel learning events, exhibitions and publications. As new ways of thinking emerge in the profession of URP, the field grows increasingly complex and requires new techniques of inquiry and planning. MIST graduates are expected to play leadership roles in shaping the built environment in a global context.

FACULTY OF SCIENCE AND HUMANITIES



Mathematics Department

The journey of the Mathematics Department will start from Spring 2026 by offering four years Bachelor's Program in "Mathematics and Data Science" under the Faculty of Science and Humanities (FSH). It will also provide essential Mathematics courses for students from all engineering disciplines.

With the recent introduction of the BSc (Hons) in Mathematics and Data Science, the department has expanded its academic horizon to align with global trends in analytics and emerging technologies. The aim of the Department is to build a strong foundation in both theoretical mathematics and modern data science. To support the Mathematics and Data Science program, the department will provide well-equipped computer and data analytics laboratories featuring modern software tools, programming environments, and digital learning resources.

The department ensures high academic standards through its outcome-based curriculum, qualified faculty, modern teaching methods, and regular assessments. It also runs the `MIST Mathematics Club' that enriches student learning by promoting mathematical thinking and problem-solving through its annual inter-department math competition and quarterly quiz contests. The mission of the department is.

- To provide a strong foundation in pure mathematics, applied mathematics, statistics, and data science.
- To develop advanced analytical, programming, and problem-solving skills through modern teaching-learning environments.
- To integrate mathematical theory with real-world applications in technology, engineering, and research.
- To promote interdisciplinary knowledge, including economics, computing, modeling, and scientific communication.
- To strengthen students' logical reasoning, communication skills, and research capabilities.
- To facilitate project-based learning and research work in mathematics, data analytics, and computational fields.

Inter Department Mathematics Olympiad 2025

Chemistry Department

The Department of Chemistry will commence its academic journey in Spring 2026 by offering a Bachelor's program in "**Chemistry and Nanoscience**" under the Faculty of Science and Humanities (FSH).It will also provide essential chemistry courses for students from all engineering disciplines.

The four-year BSc (Hons) in Chemistry and Nanoscience integrates core chemical disciplines including organic, inorganic, physical, analytical, and biological chemistry with physics, mathematics, and nanoscience. The program emphasizes hands-on laboratory work, modern instrumentation, research projects, and skills in experimental design, data analysis, computational chemistry, and nanoscale characterization. With a focus on problem-solving, critical thinking, and innovation, the curriculum prepares graduates to tackle scientific and technological challenges. The mission of the department is.

- To provide a strong foundation in chemistry, nanoscience, and interdisciplinary sciences through rigorous coursework, laboratory training, and research-based learning
- To equip students with analytical, experimental, and computational skills to solve real-world scientific and technological problems.
- To promote ethical, safe, and environmentally sustainable practices while fostering creativity and innovation

Students in Chemistry Lab

Science and Humanities (Sc & Hum) Department

The Science and Humanities department began its journey on April 19, 1998 with the establishment of MIST. From 2026, the department will commence its academic functions under the Faculty of Science and Humanities (FSH) to provide the essential intellectual foundation that complements the institute's technical disciplines, thereby ensuring that all MIST students graduate with robust communication skills as well as strong cultural and economic literacy. In pursuit of this objective, the department will assume responsibility for teaching fundamental subjects namely Physics, English, Sociology, Bangladesh Studies, Accounting, and Economics across all departments of the institute.

In addition to its academic responsibilities, the Science and Humanities department play an important role in coordinating a diverse range of technical and cultural activities to develop students' creative skills and intellectual power. These activities will include the organization of annual debate competitions, the arrangement of seminars, workshops and quiz competition. The department also supervises student organizations such as the Debating Society and the Literature and Cultural Club. The mission of the department is:

- To enhance communication proficiency and academic writing through English language instruction.
- To cultivate an informed understanding of Bangladesh's history, culture, and socio-political context.
- To equip students with fundamental accounting skills necessary for financial literacy and organizational awareness.
- To introduce core economic concepts that support informed decision-making and global economic awareness.
- To foster ethical reasoning, cultural sensitivity, and interdisciplinary thinking essential for responsible citizenship and professional growth.
- To foster graduates who are adept at interdisciplinary problem-solving, leveraging a strong foundation in fundamental physics and computational thinking to innovate in areas like sustainable technology and complex systems analysis.

REGULATORY BODIES

Council of MIST

Chairman

Honourable Minister, Ministry of Education, Government of the People's Republic of Bangladesh

Vice Chairmen

- Chief of Army Staff, Bangladesh Army
- Chief of Naval Staff, Bangladesh Navy
- Chief of Air Staff, Bangladesh Air Force

Members

- Principal Staff Officer, Armed Forces Division (AFD)
- Secretary, Ministry of Defence (MOD)
- Vice Chancellor (VC), Bangladesh University of Professionals (BUP)
- Engineer in Chief (E in C), Army Headquarters (AHQ)
- Commandant, MIST
- Commandant, Bangladesh Military Academy (BMA)
- Commandant, Bangladesh Naval Academy (BNA)
- Commandant, Bangladesh Air Force Academy (BAFA)
- Representative of the VC (Prof eqvt), Faculty of Science, Dhaka University (DU)
- Representative of the VC (Prof eqvt), Bangladesh University of Engineering and Technology (BUET)
- All Deans of Faculty (CE, ECE, ME, AP, BNE and Sc & Hum), MIST
- Representative of the Ministry of Education
- Representative of the Ministry of Finance
- Representative of the Ministry of Science and Technology
- Director, Academic Wing, MIST
- Director Administration, MIST

Secretary

Colonel Staff, MIST

REGULATORY BODIES

Governing Body of MIST

➢ Chairman

E in C, Bangladesh Army / Commandant, MIST (As per seniority)

➢ Vice Chairman

E in C, Bangladesh Army / Commandant, MIST (As per seniority)

➢ Members

- Representative of the VC, Faculty of Science, DU
- Representative of the VC, BUET
- Representative of the VC, BUP
- Dean / Senior Instructor appointed by Commandant BMA / Commandant MIST
- Dean / Senior Instructor appointed by Commandant BNA / Commandant MIST
- Dean / Senior Instructor appointed by Commandant BAFA / Commandant MIST
- Director General, Training Directorate, AFD
- Director, Military Training, Bangladesh Army
- Director, Naval Training, Bangladesh Navy
- Director, Air Training, Bangladesh Air Force
- All Deans of Faculty (CE, ECE, ME, AP, BNE and Sc & Hum), MIST
- Director, Academic Wing, MIST
- Director, Research & Development (R&D) Wing, MIST
- Director Administration, MIST
- Representative of MOD
- Representative of Ministry of Education
- Representative of Ministry of Finance
- Representative of Ministry of Post, Telecommunication and Information Technology

➢ Member Secretary

Colonel Staff, MIST

REGULATORY BODIES

Academic Council of MIST

Chairman

Commandant, MIST

Members

- Representative of the VC, Faculty of Science, DU
- Representative of the VC of BUET
- Representative of the VC of BUP
- All Deans of Faculty (CE, ECE, ME, and Sc & Engg), MIST
- Representative of Commandant, Engineering Faculty, BMA
- Representative of Commandant, Engineering Faculty, BNA
- Representative of Commandant, Engineering Faculty, BAFA
- Director, Academic Wing, MIST
- Director, Research & Development (R&D) Wing, MIST
- Director, Information & Communication Technology, MIST
- Director, Students Welfare, MIST
- Director, Administration, MIST
- Heads of all Departments, MIST
- Colonel Staff, MIST
- Controller of Exam, MIST
- One professor from each faculty, MIST (nominated by faculty dean)
- Representative of Training Directorate, AFD
- Representative of Military Training Directorate, AHQ
- Representative of Naval Training Directorate, NHQ
- Representative of Air Training Directorate, Air HQ
- Representative of MOD
- Representative of Ministry of Education

Member Secretary

General Staff Officer Grade-1 (Academic), MIST

RESEARCH AND DEVELOPMENT WING (R&D)

INTRODUCTION

In the organogram of MIST, the R&D Wing is entrusted with the task of supporting the Academic Wing that conducts not only basic and applied research but also development activities. Beside the technical education, MIST kept the provision for research and development. From the academic perspective, research is 'the systematic investigation into and study of materials, sources, etc. in order to establish facts and reach new conclusions' (Concise Oxford Dictionary). On the other hand, development means the innovative and creative adaptation of information and knowledge for a new purpose, thereby creating new information.

VISION

To promote and coordinate research, extension and development services of the various departments and faculties including testing and consultation.

MISSION

To publish various periodicals, maintain MIST archives, and arrange research-oriented seminars/ meetings within/ outside MIST.

CAPABILITIES

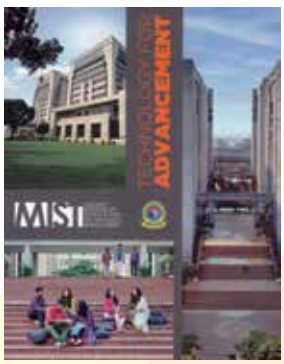
- To promote research and development services including testing and consultation.
- To make relations with outside agencies on matters of research and development.
- To provide budget and accounts for research, testing and consultation.
- To compose and publish research reports, bulletins, periodicals, journals, newsletter, diary, calendar, prospectus, brochure elc.
- To supervise and control the central workshop of MIST and the central library.
- To supervise and control the affairs of Reproduction and Printing Division of MIST.

DIVISIONS IN R&D WING

a. Archive, Research, Standardization, Testing & Consultancy (ARSIC) Cell
b. Publication & Reproduction (P&R) Cell
c. Photo & ID Cell
d. Central Library
e. Research Division

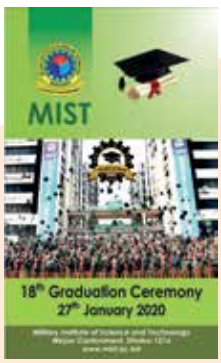
Journal

Newsletter



Brochure

Graduation Magazine



Graduation Brochure

OVERVIEW OF CENTRAL LIBRARY

The Central Library of the Military Institute of Science and Technology (MIST) was established in 1999 and stands as the intellectual hub of the Institute. Its mission is to provide high-quality knowledge resources and to support the academic and research pursuits of faculty members, scholars, students, and staff officers.

The library is well-organized and maintains a continuously expanding collection. It plans to integrate more advanced technologies to enhance user experience and service delivery in the near future. Operating under an Open Access System, the library is committed to serving both the institution and society by ensuring seamless access to knowledge.

MIST Central Library houses a broad and rich collection in the fields of science and technology. It offers extensive physical and electronic resources, including books, e-journals, newsletters, theses, CDs, and various digital materials. A student's ID card functions as a library card, enabling the borrowing of an unlimited number of textbooks for up to six months, along with five reference books for a period of 30 days.

At present, the library's holdings include:

- **68,300+ books**
- **9.8 million+ online resources**
- **1,950 CDs**
- **2,870 thesis papers**
- **550+ repository items**

To support study and research, the library provides two large reading halls with a combined seating capacity of more than **300.** Users may study with personal materials or borrow items from the collection. The book stock is arranged following the **Dewey Decimal Classification (DDC)** system, with most items kept on open shelves to ensure easy access.

The library operates a fully functional **Integrated Library System (ILS)** powered by open-source platforms such as **Koha, DSpace, VuFind, and PHP** enabling users to enjoy modern digital library services. A well-equipped browsing corner allows students and faculty to access the internet, use subscribed e-journals, and check plagiarism or grammar using available tools.

For collaborative learning, the library offers **two group discussion rooms**, each accommodating up to six members. These rooms are located on the first floor and may be used by groups of two to six students.

The **Reference Section** contains high-value information resources, including encyclopedias, dictionaries, and specialized handbooks. These materials are kept separately to maintain easy and reliable access for users seeking authoritative information.

The University of East Anglia, UK Delegation Team was visiting the MIST Central Library

Services

The Central Library of MIST provides a comprehensive range of services to support the academic and research needs of all registered members. Th following facilities are currently available:

a. Circulation Service
b. Web OPAC (Online Public Access Catalogue)
c. E-Resource Retrieval Facility
d. Current Awareness Service for newly acquired books and resources
e. Reference and Information Service
f. Email and SMS Alert Service
g. Reading Facilities
h. Long- and Short-Term Book Issue Services
i. Access to E-Books and E-Journals
j. Audio-Visual Material Issue Facilities
k. Photocopy Services
l. Browsing and Printing Facilities through the Cyber Centre
m. Wi-Fi Service
n. Reading Access to thesis papers, journals, magazines, and newspapers
o. Plagiarism Checking Facilities

Library Timing: Sunday–Thursday: 0800–2200 hrs & **Saturday:** 1500–2200 hrs

Note: *1. During preparatory leave, the library remains open on* ***Friday and Saturday from 0800– 2200 hrs****.*

2. The library remains ***closed on government holidays****.*

Loan Policy

a. Issue of Textbooks: Textbooks/précis may be issued on loan to the students/instructors for the whole duration of each term. After completion of each term, books are to be returned. Minimum 1/2copies of every title of books can be reserved in the MIST Central Library.

b. Issue of Books Other Than Textbooks:

- New books will not be issued before those are classified/ catalogued (LMS database).
- Normally, not more than 5 books are issued at a time. The normal loan period for books is 30 days. Reference books will be preserved unlimited as per as it is feasible. The students/teachers in any discipline may borrow any number of books as per their requirement for the whole term/semester.
- When a student or permanent staff member leaves MIST permanently, he/she will be required to take a clearance certificate from the Assistant Librarian and Librarian.
- All books will be issued through a prescribed library management system (LMS) of the MIST central library.
- If the authority feels the necessity of deposing books/publications in the library, an individual borrower has to deposit issued books/publications immediately.

Library Works by the Students at Central Library

ABOUT MIJST

MIST International Journal of Science and Technology (MIJST), published biannually (June and December), is a peer-reviewed open-access journal of the Military Institute of Science and Technology (MIST). This journal is a continuation of the 'MIST Journal of Science and Technology', published by MIST, under ISSN 1999-2009 from 2009 to 2011, ISSN 2224-2007 since 2012 & E-ISSN 2707-7365 since 2020.

MIJST publishes original research findings as regular papers, review papers (by invitation). The Journal provides a platform for Engineers, Researchers, Academicians and Practitioners who are highly motivated in contributing to the Engineering, Science and Technology and Applied Sciences disciplines. MIJST welcomes contributions that address solutions to the specific challenges of the developing world.

INSTITUTIONAL QUALITY ASSURANCE CELL (IQAC-MIST)

Preamble

The scope of higher education in Bangladesh is expanding rapidly across public and private sectors, with diverse programs and delivery modes. However, many institutions lack a structured framework aligned with recognized quality assurance (QA) principles. In the absence of an effective QA culture, practices often lack transparency, accountability, and consistency. Establishing internal quality assurance infrastructure is therefore essential. The creation of **Institutional Quality Assurance Cells (IQACs)** in universities promotes a strong QA culture and ensures sustained quality in education.

History of IQAC-MIST

In alignment with the national vision to elevate the standard of higher education, the Institutional Quality Assurance Cell (IQAC) was introduced across universities in Bangladesh in 2015. Following this nationwide initiative, the University Grants Commission (UGC) issued a standardized organogram for IQACs and disseminated it to all higher education institutions to foster a robust culture of quality assurance. At MIST, the establishment of IQAC was first proposed in the 2/2025 deans' committee meeting held on 03 mar 2025. The agenda, initiated by the Research and Development (R&D) Wing, was formally presented by GSO-2 (ARSTC), Major Kazi Imtiaz Kabir, SGP, Engineers. Recognizing the critical importance of institutionalizing quality assurance mechanisms, the Chairman of the Deans Committee, the esteemed Commandant of MIST, Major General Md Nasim Parvez, BSP, ndc, afwc, psc, accorded approval for the establishment of IQAC at MIST. Subsequently, the proposal underwent extensive deliberation during the 44th Governing Body Meeting, where it received unanimous endorsement from all members. Following this approval, Group Captain Toyobur Rahman, afwc, psc, PhD, was appointed as the first Director of IQAC-MIST; Major Kazi Imtiaz Kabir, SGP, Engineers, was appointed as Additional Director (Quality Assurance); and Associate Professor Dr. Kazy Noor e Alam Siddique was appointed as Additional Director (Excellence in Teaching Learning). This decision marked a significant milestone in MIST's pursuit of continuous academic and administrative excellence, formally inaugurating the Institutional Quality Assurance Cell at MIST (IQAC-MIST). Through this initiative, MIST reaffirmed its commitment to sustaining a culture of quality, accountability, and evidence-based academic development.

FORMATION OF QAC

In order to look after the key issues of quality assurance and activities of the IQAC the Quality Assurance Committee (QAC) shall be constituted in each university/institute. The IQAC shall report to the Commandant and be supervised by the University's QAC. As per reference 'A' the composition of QAC of MIST is given below:

a. Commandant, MIST
b. Pro-VC, BUP.
c. All Deans of MIST.
d. Director, IQAC-MIST.
e. Director Academic, Director R&D, Col Staff and DSW (Member).
f. Representatives of UGC (To be nominated by SPQA, UGC).
g. Two Senior Academics (Prof Dr. G M Jahid Hasan, CE Dept and Prof Dr. Md Mahbubur Rahman, CSE Dept.
h. Registrar of the University (Dir Admin).
j. Director of Finance and Accounts/Comptroller (Dir Admin).
k. Additional Director (QA), IQAC-MIST (Maj Kazi Imtiaz Kabir, SGP, Engrs) - Member Secy.

Objectives

- Institutionalize the quality assurance culture in accordance with national QA guidelines and international practices;
- Ensure that the university's quality assurance procedures are designed following the QAU guidelines and national requirements;
- Develop, maintain and enhance quality of education and people's perception in favour of the university through consistent quality assurance practice and performance;
- Build image of the university with confidence of the stakeholders ensuring transparency, accountability, and good practices in all aspects of management; and
- Prepare the university to meet the external quality assurance assessment and accreditation requirements.

Achievements of IQAC-MIST (2025)

- Rating of MIST in Times Higher Education (THE) Sustainability Impact Rating (2026)
- Internal Evaluation and ensuring submission of Self Assessment Report (SAR) by December 2025 of BAETE Accreditation of NSE, BME and IPE Department of MIST
- Selection of candidate for Tier-1 & Tier-2 Evaluator Training
- Faculty Induction Training and Workshop 2025

Faculty Induction Training and Workshop 2025

DIRECTORATE OF STUDENTS' WELFARE (DSW)

The Directorate of Students' Welfare (DSW) began its journey from 15 June 2016 with the vision of excellence in the provision of administrative leadership and counseling services to students at the Institute. DSW also promotes educational and administrative support to all structures of the Institute. The mission of this wing is to provide leadership, social, extracurricular and academic counseling programs to all students. The Directorate of Students' Welfare also seeks to challenge students to become responsible and productive citizens of the society and to support the Institute`s educational and administrative goals. DSW wing currently offers various opportunities to the students of MIST to enhance their cognitive skills and overall knowledge via arranging different competitions, seminars, workshops and career advisory programs.

With its excellent professional competency, DSW wing is working relentlessly for the welfare of the students. Additionally, DSW wing also facilitates necessary financial aid to the students by processing stipends in different categories. As such, many students have been able to continue incessant study at MIST. Moreover, DSW wing also patronizes all the clubs run by the students and monitors their activities for attending the creativity among the students. One of the most important activities of the DSW wing is mentoring Alumni activities. Furthermore, DSW wing is always open to all students of MIST regarding any difficulties at any time.

Facilities provided by DSW Wing:

a. Stipend. MIST provides stipend facilities to the students. Other than level 1, students of all levels have the opportunity to apply for stipend based on their academic result and financial condition. To render educational support to the students for their uninterrupted study, parents' economic condition is assessed under 19 different categories. A board of officers headed by the director of the students' welfare select the students and the percentage of stipend.

b. Counseling Service. MIST has counseling service for the students under a qualified and professional counselor. The counselor of DSW wing works actively with the students and uses a variety of skilled interventions and thereby offers both psychological and emotional support. It helps the students to develop insight into their situation and helps them build better personal resources with greater resilience. Besides the particular cases, online workshop sessions are conducted on mental health related issues for the students where they are benefitted by developing practical skills like assertiveness, relaxation techniques and resilience building.

Inter Department Football Competition 2025


Interaction between Counselor and Student

c. MIST Student Welfare Fund. MIST has a Student Welfare Fund which operates with the objective of making financial assistance available for meeting the welfare needs of the students. The elected representatives among the students run the welfare fund which is monitored by the DSW wing. The sources of the student welfare fund are:

(1) Voluntary contribution from the students.

(2) Contribution from the alumni.

(3) Contribution from the MIST authority and Faculty.

(4) Voluntary contribution from other sources.

The DR's shall discuss and decides upon the applications submitted by the student seeking financial support from Students Welfare Fund which will be finally approved by the director of DSW wing.

d. Club Facilities and Campus Hour. MIST offers 17 different clubs for the students to join and get the opportunity to show their creativity. This also gives a breathing space to the students from monotonous study. Students have the freedom to select and join more than one club from the following categories. To add variety and flavor, students of all levels also organize campus hour at regular intervals.

1) MIST Computer Club.
(2) MIST Career Club.
(3) MIST Debating Society.
(4) MIST Drama and Film Society Club.
(5) MIST Einthoven Club.
(6) MIST Innovation Club.
(7) MIST Aeronautics & Astronautics Club.
(8) MIST Environment Club.
(9) MIST Literature and Cultural Club.
(10) MIST Photographic Society.
(11) MIST Robotics Club.
(12) MOTO MIST Automotive Club.
(13) MIST Readers Club.
(14) MIST Cyber Security Club.
(15) MIST Nuclear Engineering Club.
(16) MIST Math Club.
(17) MIST Optimist Club.

Campus Hour and farewell Program 2025 was organized by MIST Cultural Club

e. Residential Facilities. MIST provides a good environment and facility of residence for the students who are from different parts of the country and abroad at bare minimum expense. At this moment MIST has an enthralling hall named "Osmany Hall". The eight-storey reinforced concrete facility has a male and a female complex where 560 male and female students can be accommodated. The Male Wing has one extension accommodating 95 students, in total 655 students (male and female) can be housed at the residential facilities of Osmany Hall.

f. Sports Facilities. Sports help to develop physical fitness and mental well-being. MIST motivates and facilitates students both in indoor and outdoor sports. The institute has well equipped facilities for both indoor and outdoor games, like Cricket, Football, Basketball, Table Tennis, Chess, Carrom etc. Every year the institute hosts Inter Department Basketball, Football, Volleyball and Cricket Competition. Sports refreshes minds, as a result, students can concentrate and focus on education in a sound mind.

g. Record Cell. MIST was established in 1998 and DSW wing started its operation in 2016. The need for a record cell has been observed since the beginning of DSW wing operation. As a result, the activities of the record cell started in 2021. All the information and discipline related issues of all the students of MIST are preserved here. Testimonial/character certificate is issued from DSW wing.

h. Placement Centre. Every year MIST organizes job fairs for its students for job prospects. The Directorate of Students' Welfare oversees these events as part of career counseling. This ceremony is held every year at the time of graduation. At these events, representatives of various national and international organizations come to collect the students' CVs and take the written test / Viva according to their recruitment policy. While these events are primarily focused on graduating students, other students are also benefited in this regard.

DSW Wing is planning to start "Placement Center" which will assist suitable employment for the students. The center serves to bring together graduate students and recruiters who might not normally have a connection. The office makes every effort to ensure that eligible students and alumni are provided with career opportunities that best suit their needs and skills.

MIST Career Club Activities

MIST Cafeteria

Inspection by Commandant MIST

Food Fest

Sports Corner

Photography Exhibition

Students Enjoy Food and Snacks
at Special Subsidy Price at MIST Cafeteria

DO'S AND DON'TS FOR STUDENTS

1. Do's (For All)

a. Strictly maintain the MIST timings and be present in time in all scheduled programs/ events.

b. Behave nice with all the members of MIST and maintain a congenial atmosphere in the campus.

c. Strictly maintain the MIST attire (follow the dress code, maintain smart turnout/bearing and have proper hair cut)

d. Give proper attention to maintain physical fitness and appearance during the stay at MIST.

e. Forward any problem and/or suggestion and inform all improper incidents to MIST authority at the earliest.

f. Take care of personal belongings, especially during lab classes and library works, when bags are kept outside.

g. Fix/hang Identity card clearly visible while in the campus. Show identity card if asked by the duty personnel of MIST.

h. know all the relevant rules / policy pertinent to students e.g. examination policy, withdrawal policy, library policy etc.

j. Do use footpath while walking along the road within MIST campus.

2. Do's (For Military Students Only)

a. Be responsible for the belongings of the room in BOQ issued by the MIST authority. Receive voucher for items issued with allotted room in BOQ.

b. Join PT/Drill, Games and Study Periods as per the training program.

c. Stay in department/class rooms during disposal classes.

d. Maintain the discipline in Student Officers' Mess/Female BOQ and MIST cafeteria.

e. Joining in Dinner Nights and Guest Nights is a must for the student officers.

f. Follow the mess rules of MIST Student Officers' Mess and clear all mess bills (self and batman) within 7th of the following month according to AR (1) 636.

g. Handover the allotted room in BOQ to MIST authority within specified time period before moving for permanent posting or temporary attachment or any other purpose.

h. Supervise the discipline of the batmen and ensure that they dine only ir. MIST designated mess. Breach of discipline by the batman will be dealt as per existing policy of MIST.

j. Ensure that batman possess identity card issued by MIST authority without which he will not be allowed to enter/stay in MIST. Spare him for administrative works under Mess NCO/RP NCO for a specified time every day as specified by Administrative Wing. Ensure police verification is carried out by Admin Wing before you employ any batman.

k. Follow the rules and regulations while driving, park your personal vehicle in designated authorized places and wear helmet while riding on Motor Cycle for safety

l. Endorse personal details in specified In/Out Register while leaving Mirpur Cantonment. All the student officers are to return to Officers Mess or accommodation by the time as specified by Officers' Mess Authority.

m. Strictly adhere to the respective service rules and regulations.

3. Don'ts (For All)

a. Don't fail to report to any organized events in time

b. Students are strictly forbidden to form or be members of student organization or political party, club, society etc., other than those set up by MIST authority in order to enhance student's physical, intellectual, moral and ethical development.

c. Don't discuss any political and controversial religious issues in the campus.

d. Don't involve in drug addiction and abuse. Zero tolerance will be observed in this respect and action will be taken as per MIST and service rules.

e. Don't involve in teasing opposite gender or sexual harassment. Zero tolerance will be observed in this aspect and action will be taken as per MIST and service rules.

f. Don't adopt unfair means in any examination. Severe action will be taken as per MIST and service rules (as appropriate).

g. Don't smoke in the academic premises other than specified area.

h. Do not use cell phone during class/presentation.

j. Do not use headphone during class/presentation.

k. Students should not carry haversack on their back once he/she are inside the lift.

l. Do not consume food inside a class room/lift/during walk.

m. Do not drop or through trash without properly disposing at class room or MIST premises.

n. Do not involve in ragging. Ragging is strictly prohibited in hall and campus premises. Zero tolerance against ragging and severe action will be taken against ragging as per MIST rules.

p. Do not write anything in the FB or any type of social media that goes against the interest of the institution. Anyone ident will be dealt severely.

q. Do not involve in any kinds of gambling in campus/hall premises.

4. Don'ts (For Military Students Only)

a. Don't take any Officers, civil students and guests of opposite gender in any room of BOQ except to the specified guest room. Maintain 'In/out Register for this purpose.

b. Don't take any civil classmates to ante room and dining hall of the Student Officers' Mess.

c. Don't allow any guest to stay in BOQ at night without prior permission of PMC.

d. Don't allow any batman to stay in the rooms allotted to officers and in MIST while the officers are on temporary attachments after academic session or during leave.

e. Don't keep any personal vehicles in MIST premises while on temporary attachments after completion of academic year or during leave. Do not wash any vehicles in unauthorized place.

f. Don't allow anyone except yourself or your personal driver to drive your vehicles.

g. Do not visit any faculty member's residence.

FACILITIES AND SERVICES

Class Room. MIST has adequate number of air conditioned classroom with multimedia facilities.

Accommodation. MIST, in principle is a residential institute. The residential hall with all modern facilities is named 'Osmany Hall' can accommodate 660 students (male 380 and female 280). Each room has internet facilities. Students are provided with well-furnished accommodation.

Library. MIST has a well-arranged library enriched with about 68,300+ books and a good number of periodicals, journals and magazines from home and abroad. It also subscribes a number of Bengali and English newspapers, periodicals and e-journals. Library has cyber cafe with Wi-Fi facilities. In addition to that each department has its own library enriched with adequate text and reference books.

Medical Support. MIST Medical Centre has residential physician, medical staff and equipment. MIST Medical centre provides required medicine and other necessary support as prescribed by the Medical Officer. Civil students are sent to Kurmitola General Hospital for better treatment.

Transport. MIST provides bus services for the students. The buses move in nine routes: MIST to Shahbag, MIST to Abdullahpur, MIST to Azimpur and MIST to Dhaka Cantonment (Jahangir Gate). A student is charged with 1500 BDT per year as transport charge.

MIST IT Centre. IT Centre provides internet browsing facilities to students and faculties.

Cafeteria. Cafeteria provides different types of cuisine at reasonable price.

Fitness Centre. Fitness Centre provides ample opportunities for the students to keep their body and mind fit.

Sports and Recreation. MIST has adequate facilities for both indoor and outdoor games including table tennis, badminton, football, and cricket. Students can also enjoy a wide variety of athletic pursuits. Besides picnics and cultural competition, celebration of national days are also arranged regularly in a befitting manner.

MIST Career Club. MIST career club was established in June 2016. Each year it organizes career festival in collaboration with different institutions and organizations. Last year MIST Career Fest was held on13th August 2016 with the assistance of BD jobs.com.

MIST Mongol Barota Shines at University Rover Challenge (URC) 2025

MIST Innovation Club. With the noble purpose of branding MIST in the field of advanced science and technology in Bangladesh , MIST Innovation Club (MIC) has commenced its journey on 12 February 2020. Our club thrives to create a platform to inspire the students of MIST in achieving technical and also soft skills to build innovative products or solutions that will represent MIST to the nation. Our eminent maxim is to "*Innovate to Serve*".

MIST Photographic Society. MIST photographic society "FOCUS" started its journey in April 2015. It organizes workshop, seminar, exhibition and short course on photography etc. periodically.

MIST Drama and Film Club. To promote the art and culture of Bengali heritage, MIST Drama Club was initiated in 2015. It organizes different types of Drama on various occasions.

MIST Literature & Cultural Club. MIST Literature and Cultural Club was formed in 2014 to create various opportunities to practice art and our culture via organizing various workshops, events etc. MIST Literature and Cultural Club believes technology and creativity do not contradict each other,rather both of them contribute to proper manifestation of a student. To uphold this belief, MIST Literature and Cultural Club has gloriously trodden its way far by inspiring and involving the students.

MIST Computer Club. Computer Club arranges various workshops and competitions regarding different programming languages and also conducts club activities on regular basis.

MIST Aeronautics and Astronautics Club (MAAC). MIST Aeronautics and Astronautics Club is supervised by the Department of Aeronautical Engineering. Its aim is to spread knowledge of aeronautics and astronautics among the enthusiastic students of MIST.

MIST Einthoven Club. MIST Einthoven Club is supervised by the Department of Biomedical Engineering which aims to broaden the knowledge of its members about recent development and resources around the globe on Biomedical Engineering.

MIST Clubs logo

MIST Automobile Club. MIST Automobile Club is supervised by the Department of Mechanical Engineering which holds various workshops and club activities regularly.

MIST Environment Club. MIST Environment Club is supervised by the Department of EWCE, which aims to promote engineering concern and solution approaches towards environmental and water resources issues among the members. This club regularly organize various seminars, exhibitions and other events on World Environment Day, World Water Day and many other occasions.

MIST Robotics Club. MIST Robotics club was established in the year 2015 under the guidance of EECE department. To cope with the technological advancement MIST Robotics Club provides opportunity to the students to explore their innovative ideas on activities. It organizes Robotics workshop and competition every year. It also organizes the Robolution competition which is the largest robotics competition in Bangladesh.

MIST Nuclear Engineering Club. The club is for the students who are interested in the field of Nuclear Engineering at MIST. Each of the club's activities are dedicated to the promotion of safe use of nuclear energy and organization of relevant workshops and seminars.

Hydraulic Pump Testing Bench. The "Hydraulic Pump Testing Bench" was inaugurated on 24 May 2016. This Testing Bench is one of the landmark establishments of MIST in the path of research and project work. By using updated and advanced technology, this unit will surely serve to make the institution a "Centre of Excellence".

Automotive Engineering Equipment Testing Centre. The "Automotive Engineering Equipment Testing Centre" provides the technological support in the field of research and project work. It also provides students with ample opportunities to utilize their knowledge into practice by solving real-world problem. It also provides necessary technical support to different governmental organization regarding type approval of motor vehicles and other tests.

Computer Repair and Maintenance Centre. The "Computer Repair and Maintenance Centre" was inaugurated on 01 December 2013. MIST has a well enriched "Computer Repair and Maintenance Centre" for repairing the defective computer and accessories.

Centre for Energy, Environment Studies and Research (CEESR). The "Centre for Energy and Environmental Studies" of MIST is under the auspices of the department of EECE which is engaged in education, research, and professional training in the fields of energy and environmental analysis. The perspective of the centre is multi-disciplinary and problem-oriented

Captaincy. To promote leadership qualities among the students MIST Captain in various categories are elected from the students, namely MIST Captain, MIST Cultural Captain, MIST Debate Captain and MIST Sports Captain. Besides these, department captains of same categories and class captains are also elected for smooth functioning of students' activities.

Centre for Disaster Management Studies. Bangladesh is a disaster prone country. To provide quality human resources and facilitate disaster related research work for Disaster Management in Bangladesh a research centre named "Centre for Disaster Management Studies" under CE Department is functioning.

Environment and Climate Change Studies Centre. Climate change has become a burning issue for sustainable development. To contribute in capacity building and develop an appropriate technology, CE Department has incorporated environmental engineering in its post graduate program. A Research Centre named "Environment and Climate Change Studies Centre" is facilitating research work on this issue.

Inauguration Ceremony. Each year launching ceremony of academic session is arranged for apprising new students regarding the salient aspects of MIST activities. MIST welcomes all the young engineering students including their guardians in this ceremony. There are interactive sessions for the guardians with MIST authority and orientation with MIST campus. All the students of level-1 in different disciplines (both military and civil) join the ceremony.

Graduation Dinner. MIST organizes graduation dinner in honour of the outgoing students. Newly graduates from MIST attend this program after successful completion of their graduation from MIST. Students of level-4, all faculties and staff officers also join the dinner.

Collaboration with Other Universities For expanding research capability including undertaking of faculty-students exchange program MIST has signed Memorandum of Understanding (MoU) with numbers of organizations and universities both in home and abroad. Few notables are: Mershon Center For International Security Studies and The School of Earth Sciences, The Ohio State University (OSU), Columbus, Ohio, United States, The Institute of Water Modelling (IWM) Bangladesh, University of Malaya (UM), Stamford University Bangladesh, Port City International University, Institute of Information Technology (IIT) & Jahangirnagar University (JU), International Islamic University Malaysia (IIUM), University Kebangsaan Malaysia (UKM), University Tenaga Nasional (UNITEN), Kotelawala Defence University (KDU) Srilanka, United States Naval Academy (USNA), University Technology Mara (UITM), Bangabandhu Sheikh Mujibur Rahman Maritime University (BSMRMU), Bangladesh, Indian Institute of Engineering Science & Technology (IIEST) India, etc.

MoU Signing Between MIST and Neural Semiconductor Limited

MoU Signing Between MIST and Fortis Group


MoU Signing Between MIST and Bangladesh Clinical Trials Limited (BTCL)


MoU Signing Between MIST and GreenHul Solutions Limited

MoU / AGREEMENT

MIST has established Memorandum of Understanding (MoU) and Agreement with numbers of universities/institutions/organizations in home and abroad. The universities/institutions/ organizations are as follows:

Ser	Foreign University/ Institution/Organization	Year
1.	Macquarie University, Australia	2025
2.	ReWET Proj Consortium, UK	2025
3.	The Istituto Nazionale di Geofisica e Vulcanologia (INGV), Italy	2024
4.	Ankur (USA)	2024
5.	Monash University, Malaysia	2024
6.	The University of Texas at Arlington (Arlington, Texas, U.S.A)	2023
7.	Lincoln University, UK	2021
8.	Lakehead University (Ontario, Canada)	2021
9.	Indian Inst of Engg Science & Technology (IIEST), Shibpur, India	2015

Ser	Local University/Institution/ Organization	Year
1.	Bangladesh Atomic Energy Commission (BAEC)	2025
2.	Fortis Group Bangladesh	2025
3.	Neural Semiconductor Limited	2025
4.	ConfigRbot	2025
5.	CUET	2025
6.	Business Automation Limited	2025
7.	ADN DigiNet Limited	2024
8.	Walton Digi-Tech	2024
9.	Water Sun Wind Technologies (WSWT)	2024
10.	Bangladesh Computer Council	2024
11.	QA Pro Ltd	2024
12.	Young Genius Bangladesh Ltd	2023
13.	Combined Military Hospital (CMH)	2023
14.	Bangladesh Industrial Technical Assistance Center (BITAC)	2023
15.	UCB Fintech Company Ltd.	2023
16.	GPH Ispat Ltd.	2023
17.	Kingston Hospital	2022
18.	Fair Group	2022
19.	Armed Forces Medical College	2021
20.	JMI Hospital Requisite Manufacturing Ltd (JHRML)	2016
21.	Gono Bishwabidyalay (GB)	2015
22.	Active Fine Chemicals (AFC)	2015
23.	Bangladesh Maritime University (BMU)	2015

SEMINARS

Following are the seminars conducted by various departments of MIST on 2024 & 2025

Ser	Seminars	Organizing Department
	CE Department	
1.	Life-long Journey of an Engineering Student: Undergraduate to Professional Career (Dt 31 July 2025)	CE
2.	Evaluation and Rehabilitation of Concrete Bridges (Dt 15 May 2025)	CE
3.	Advancement in Sustainable Infrastructure (Dt 12 December 2024)	CE
4.	Prospects of Higher Studies in Kennesaw State University, USA, 2024	CE
5.	Seminar and Discussion about potential collaboration between ACF and MIST (Dt 17 January 2024)	CE
	ARCH Department	
1.	"AI: Alien Intelligence or Artificial Intelligence? Will AI Wipe Out Architects?" by Ar Ashik Vaskor Mannan, Senior Associate Professor, AIUB.	ARCH
2.	"Community-Led Disaster Response" webinar by Ar Khondaker Hasibul Kabir, Aga Khan award winner Community & Landscape Architect.	ARCH
3.	"Earthquake Resilient Building Design and Construction Details" by Eng. Mohammad Abu Sadeque, Executive Director, Center for Housing and Building Research (HBRC).	ARCH
4.	"Disaster Shelter and Accessibility" By Nazmul Haque Nehal, Director Program- SARPV (Social Assistance and Rehabilitation for the Physically Vulnerable).	ARCH
5.	Lecture On "Connecting People, Places And Architecture" By Dr. Sheikh Serajul Hakim, Professor, Khulna university	ARCH
6.	"Co-creation with Children and Youth for Inclusive Neighborhoods in the Urban Area", Webinar, by Dr. Matluba Khan, Senior Lecturer, Cardiff University, UK	ARCH
7.	"Inclusivity in the Built Environment", by Dr. Mohammad Faruk, Associate Professor, BRAC University.	ARCH
8.	"From Streets to Spaces: Lessons from Design, Management and Community Engagement", by Ar. Farhana Rashid Tonu, Founder and CEO of Bhumijo Ltd.	ARCH
	CSE Department	
1.	Webinar on Delve into AI and Robotics Insights from MIT and Cal Poly Experts of the CSE Dept	CSE
2.	Seminar on Resilience in the Information Domain: Tools to Address Misinformation and Disinformation on Social Media	CSE
3.	Seminar on OBE Curriculum	CSE
	EECE Department	
1.	6th International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT-2024)	EECE
2.	Motivational sessions on Humanitarian Assistance	EECE
3.	Launching GNSS Ionospheric Observatory: New Horizon Of Collaborative Space Research In Bangladesh	EECE

Ser	Seminars	Organizing Department
ME Department		
1.	Future Proofing Engineering career : Mastering the Top Employability Skills (Webinar)	ME
2.	Additive manufacturing : A powerful tool for the Aerospace industry and future prospect in Bangladesh . (Webinar)	ME
3.	"Passive Cooling solution for Heat stressed population of Bangladesh Lessons Learned from Homa Bay. Kenya" (Webinar)	ME
4.	"Energy Transition and Decarbonisation.''(Webinar)	ME
5.	"Next Generation Engineering Materials Innovations Shaping the Future"(Webinar)	ME
NAME Department		
1.	Career Talk-2025	NAME
2.	Seminar on " Causes & Prevention of Inland Marine Accidents"	NAME
AE Department		
1.	From Academia to Innovation: Breaking into Leading Aerospace Companies	AE
2.	Predictive Computational Material Modeling Using Machine Learning at Atomistic Scale (Webinar)	AE
3.	Deep Leaming in Aerodynamics (Webinar)	AE
4.	Career in Aerospace & Aviation Industries (Webinar)	AE
5.	Seminar one career Prospects form Alumni Working at Boeing	AE
EWCE Department		
1.	Seminar on the theme of World Environment Day-2025 "Beat Plastic Pollution"	EWCE
PME Department		
1.	Guest Lecture on "Horizontal and ERD Well Planning and Execution – A Case Study"	PME
2.	Guest Lecture on "Application of Isotope Techniques in Groundwater Management in Mine"	PME
3.	Guest Lecture on "Natural Gas Transmission and Distribution System in Bangladesh".	PME
4.	Guest Lecture on "Application of Artificial Intelligence / Machine Learning in Petroleum Engineering".	PME
5.	Guest lectureon "A coal mine feasibility study for a mining project".	PME
IPE Department		
1.	Industrial Talk 2.0 - "Bridging Industry & Academia: Operational Excellence & Industrial Innovation" - July 2025	IPE

WORKSHOPS

Ser	Workshops	Organizing Department
	CE Department	
1.	Industrial Visit to AKIJ Steel Mills Ltd (Dt 13 September 2025)	CE
2.	Industrial Visit to AKIJ Ispat Ltd titled by Industry Connects Academia (Dt 30 August 2025)	CE
3.	Industrial Visit to Ananta Terraces, the Largest Residential Building Project in South Asia (Dt 04 January 2025)	CE
4.	Two Days-long Workshop on PTV Vissim/PTV Viswalk Academic Exercise – Microscopic Traffic Flow and Realistic Pedestrian Simulation Basics, 2024	CE
5.	Quantum Electric Arc Farnes Technology for the Production of Construction Steel, GPH Ispat. (Dt 22 May 2024)	CE
	EECE Department	
1.	Workshop on BAETE & OBE	EECE
	ME Department	
1.	3rd International Conference on Mechanical Engineering and Applied Sciences (ICMEAS 2025)	ME
	AE Department	
1.	Workshop on Quadcopter Drone	AE
	Arch Department	
1.	Hands-on Mapping exercise on Urban Behavioral Mapping in Urban Design Studio, Level 04.	Arch
2.	Photography workshop "Through the Lens1" organized by Dept. of Architecture under the MIST Photography Club.	Arch
3.	Field workshop at Jolshiri Residential area under the Cost Estimation & Specification (ARCH 4161) course.	Arch

SHORT COURSES

Ser	Short Courses	Organizing Department
PME Department		
1.	Short course on "Analysis of Lubricating Oil & Liquid Fuel Properties".	PME
AE Department		
1.	Design, Build and Flying of Fixed-Wing and Rotary-Wing UAVs from Scratch	AE
CSE Department		
1.	Digital Skills Development for GoB Officials	CSE
EECE Department		
1.	Short Course on Introduction to Machine Learning and Python	EECE
2.	AutoCAD for Electrical Service Design	EECE
3.	MATLAB & Python Course organized in 2021	EECE
4.	Programming Language Course (C, C++)	EECE
5.	Short Course on Thunder Arresters	EECE
6.	Short Course on Cable Designing	EECE
7.	Microcontroller-Based Embedded System Design using Arduino	EECE
8.	Short Course on Electrical Protective Devices	EECE
NAME Department		
1.	Certification Course on Ship Design Software (MAXSURF & RHINO)	NAME
BME Department		
1.	Introduction to Solidworks.	BME
2.	Introduction to MATLAB & Simulink.	BME
EWCE Department		
1.	Short Course on ETABS	EWCE
2.	Short Course on DELFT3D	EWCE

LABORATORY FACILITIES

Faculty of Civil Engineering

CE Department

- Concrete Laboratory
- Structural Mechanics (SM) Laboratory
- Geotechnical Engineering Laboratory
- Geotextile Testing Laboratory
- Transportation Engineering Laboratory
- Survey and Mapping Laboratory
- Geographic Information System (GIS) Laboratory

EWCE Department

- Environmental Engineering Laboratory
- Microbiology Lab
- Biochemical Lab
- Pollution Chemistry Lab
- Water Resources Engineering Laboratory

PME Department

- Petroleum Engineering Lab
- Core Analysis Unit
- Drilling Fluid Unit
- Rig Floor Simulator Unit
- Fluid Analysis Unit
- Geology Unit
- Natural Gas and LPG Lab
- Simulation Lab
- Mining Engineering Lab
- Rock Engineering Unit
- Mineral Processing Unit
- Mining System Unit
- Sample Preparation Unit
- Geology Unit
- Coal Testing Unit
- Petroleum products & lubricating Oil Testing Lab (POL)

Faculty of Electrical and Computer Engineering

CSE Department

- Intelligent Computing Laboratory
- Cyber Range
- Software Quality & Security Testing Laboratory
- Mobile App & Game Testing Lab
- Human Computer Interaction Laboratory
- Postgraduate Research Laboratory
- Software Engineering Laboratory
- Digital Laboratory
- Microprocessor & Microcontroller Laboratory
- Artificial Intelligence Laboratory
- Interfacing &IoT Laboratory
- Network Laboratory
- Multimedia & Graphics Laboratory

EECE Department

- Electrical Circuit Laboratory
- Measurement & Instrumentation System Laboratory
- Control System Laboratory
- Electronics Laboratory
- Power Electronics Laboratory
- Electrical Circuit Simulation Laboratory
- Electronic Circuit Simulation Laboratory
- Numerical Technique Analysis Laboratory
- Digital Signal Processing Laboratory
- VLSI Laboratory
- Electrical Machine Laboratory
- Advanced Machine Laboratory
- Power System Laboratory
- Switchgear & Protection Laboratory
- High Voltage Laboratory
- Analog and Digital Communication Laboratory
- Microwave Laboratory
- Telecom Laboratory
- Electronic Warfare Laboratory
- Sonar and Under Water Engineering Laboratory
- Communication Network Laboratory
- Radar Engineering Laboratory
- Biomedical Signal Processing Laboratory
- Biomedical Instrumentation Laboratory

Faculty of Mechanical Engineering

ME Department

- Measurement & Quality Control Laboratory
- Thermodynamics Laboratory
- Applied Thermodynamics Laboratory
- Refrigeration & Air Conditioning Laboratory

- Heat Transfer Laboratory
- Automobile Laboratory
- Machine Tools Laboratory
- Materials and Metallurgy Laboratory
- Drawing Laboratory
- CAD Laboratory
- Heat Engine Laboratory
- Applied Mechanics Laboratory
- Fluid Mechanics Laboratory
- Robotics and Control Laboratory
- Workshop

AE Department

- Applied Aerodynamics Laboratory
- Jet Propulsion Laboratory
- Radar Engineering Laboratory
- Avionics Sensors and Guidance Laboratory
- Aero Structure and Composite Material Laboratory
- Aero–Weapon System and Missile Laboratory
- Aircraft Instrumentational and Control Laboratory
- Aero plane Design Laboratory

NAME Department

- Computer Aided Ship Design Lab
- Marine Hydrodynamics Lab
- Towing Tank and Stability Test Lab
- Ship Structure and Fabrication Lab
- Ship Model Fabrication Lab
- Marine Machinery Lab
- Damage Control, Fire Fighting and Life Saving Lab
- Ship Resistance Lab
- Ship Propulsion Lab
- Ship Instrument Lab

IPE Department

- Advanced Machine Tools and Production Process Lab
- Ergonomics and Safety Lab
- Computer Integrated Manufacturing and Automation Lab
- Material Handling Lab
- Simulation & Process Engineering Design Lab
- Instrumentation, Measurement and Quality Control Lab
- Material Characterization Lab

Faculty of Biomedical and Nuclear Engineering

NSE Department

- Radiation Detection and Medical Application Lab
- Nuclear Chemistry and Safeguard Lab
- Modelling and Simulation Lab
- Thermo Fluid Dynamics Lab
- Nuclear Reactor and Control System Design Lab
- Nuclear Technique and Material Lab
- Nuclear Safety and Security Lab
- Nuclear Fuel and Waste Safety Lab

BME Department

- MRI & CT Scan Training Laboratory
- Biochemistry Laboratory
- Bio-fluids Laboratory
- Biomaterials Laboratory
- Biomechanics Laboratory
- Biomedical Image Processing Laboratory
- Biomedical Instrumentation Laboratory
- Cell and Tissue Engineering Laboratory
- Medical Device Development Laboratory

Faculty of Architecture and Planning:

Arch Department

- Architectural Design Laboratory
- Building Technology Laboratory
- Urban and Landscape Design Laboratory
- Heritage Conservation and Rebuilding Laboratory
- Environmental Design Laboratory
- Photography and Digital Image Laboratory
- Computer Laboratory
- Model Making Laboratory

Urban and Regional Department

- GIS, Remote Sensing and Data Analysis Lab
- Simulation Lab
- Transportation Lab
- Cartography Lab
- Engineering Survey Lab

Faculty of Science and Engineering

Science and Humanities (Sc & Hum) Department

- Chemistry Laboratory
- Physics Laboratory

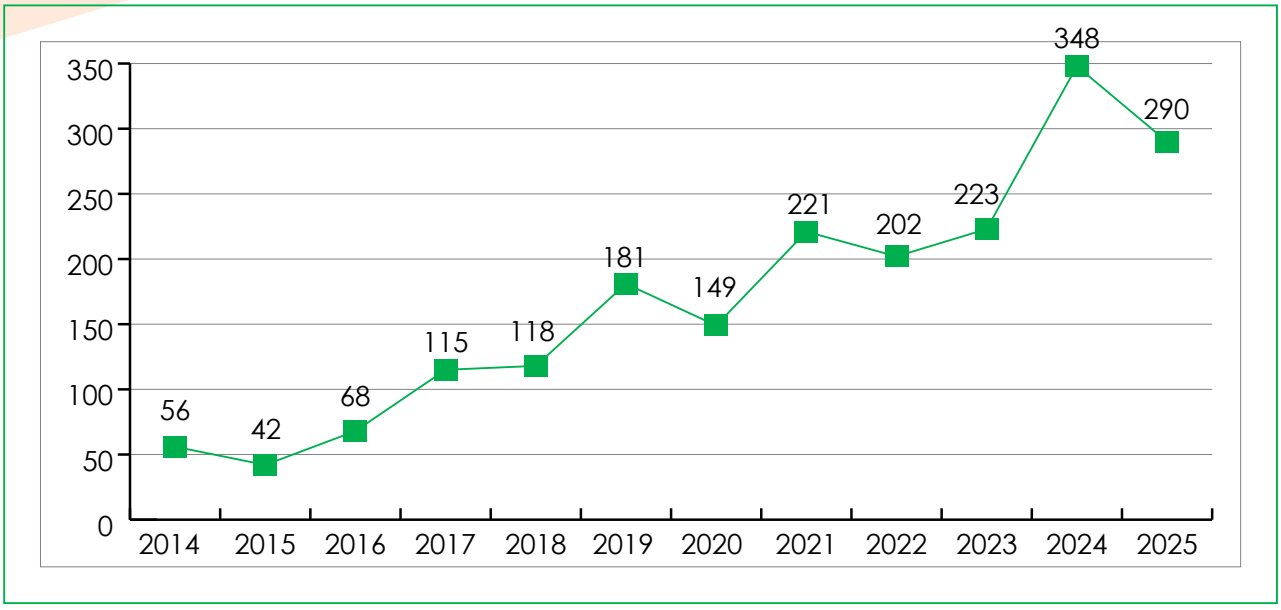
FACULTY MEMBERS

A group of qualified faculty from military as well as from civil society (internationally reputed) are relentlessly engaged in imparting knowledge to the students. In addition, faculties from reputed universities contribute as resource persons in various disciplines. Guest speakers / faculties from various organisations / institutions / universities are also invited to participate in teaching programs, lecturers, seminars etc. At present, the state of Instructors / faculties of MIST are as follows:

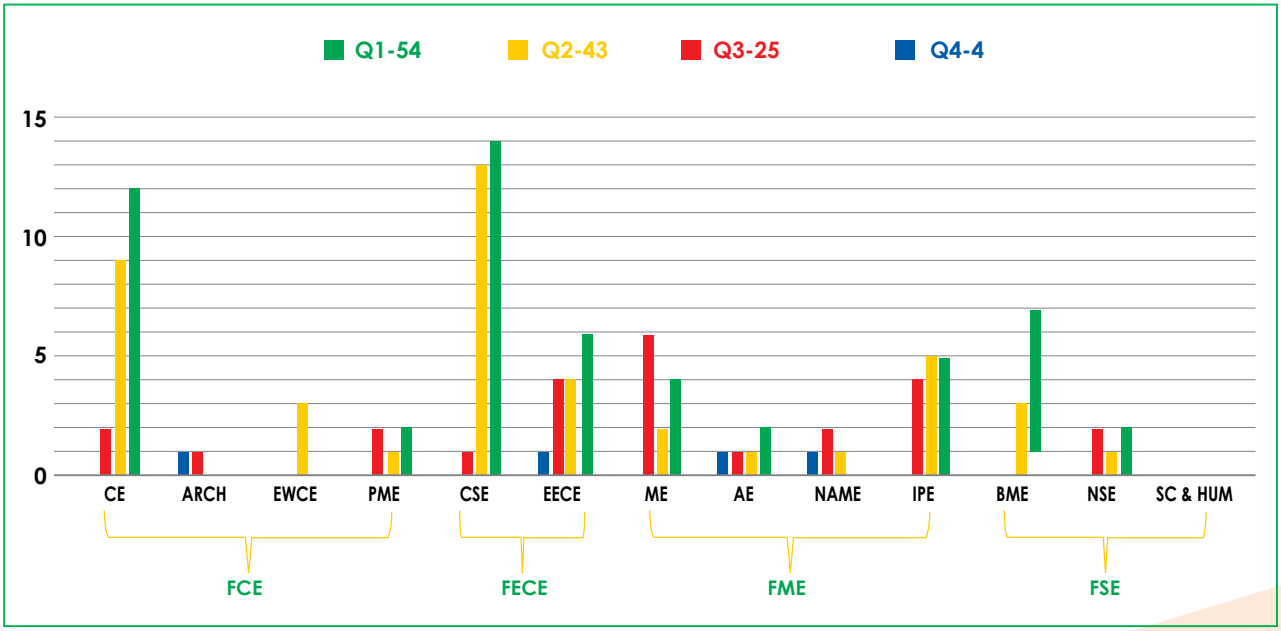
Appt		Faculty of CE				Faculty of ECE		Faculty of ME				Faculty of Sc & Engg			Total
		CE Dept	ARCH Dept	EWCE Dept	PME Dept	CSE Dept	EECE Dept	ME Dept	AE Dept	NAME Dept	IPE Dept	BME Dept	NSE Dept	Sc & Hum Dept	
Maj Gen (Retd)		-	-	-	-	-	-	-	-	-	-	-	-	01	**01**
Brig Gen (Retd)		**02**	-	-	-	02	-	-	-	-	01	-	-	02	**07**
Brig Gen		01	-	01	-	01	01	01	01	01	01	-	-	-	**08**
Professor	Permanent	02	-	-	-	01	-	-	-	-	-	-	-	-	**03**
	Contractual	**04**	-	02	02	01	02	02	01	-	01	01	02	-	**18**
	Adjunct	-		02	-	-	-	04	-	-	01	-	01	02	**10**
	Other Universities	03	02	01	06	-	-	02	02	-	-	-	03	06	**25**
Col		01	01	-	01	-	01	01	01	01	01	01	01	01	**11**
Associate Professor	Permanent	-	-	-	-	01	01	-	-	01	-	-	-	-	**3**
	Contractual	02	02			03	03	02	-	-	-	-	-	-	**12**
	Adjunct	-	04	-	-	01	-	01	01	-	-	-	-	-	**7**
	Other Universities	01	-	01	-	-	-	-	-	-	-	01	02	-	5
Lt Col		04	-	03	01	02	03	02	01	02	01	01	01	07	**28**
Assistant Professor	Permanent	-	--	--	-	01	02	02	02	01	-			02	**10**
	Contractual	-	06	-	01	02	-	01	-		01	02		01	**14**
	Adjunct	03	-	-	-	-	01	03	02		-			02	**11**
	Other Universities	-	-	-	-	-	-	-	01	-	-	03	-	-	**4**
Maj		-	02	02	-	03	03	02	01	02	01	01	01	04	**22**
Lecturer	Permanent	01	-	-	-	01	01	01	01	01	-	-	-	-	**6**
	Contractual	-	03	03	02	01	-	02	-	-	02	-	-	-	**13**
	Adjunct	16	08	06	06	15	18	14	08	08	06	08	06	22	**141**
	Other Universities	01	-	-	-	-	-	-	-	-	-	01	-	-	**2**
TA	Contractual	01	-	01	-	01	-	-	02	-	-	-	-	-	**5**
RA	Contractual	12	-	01	-	04	01	01	01	-	-	01	03	-	**24**
Total		**54**	**28**	**23**	**19**	**40**	**37**	**41**	**35**	**17**	**16**	**20**	**20**	**50**	**390**

MIST PUBLICATION JOURNEY

SCOPUS INDEXED PUBLICATIONS AFFILIATED TO MIST



SCOPUS INDEXED JOURNAL PAPERS - 2024



RECOGNITION OF ACADEMIC PERFORMANCE

OSMANY MEMORIAL GOLD MEDAL

Awarded to the graduating regular student with highest CGPA obtained graduating regular student among all the MIST medal winners.

FRONT VIEW REAR VIEW

MIST MEDAL

Awarded to the top graduating student in each department, recognizing outstanding academic performance and commendable discipline during their academic journey.

Dean's List

- All regular students of all departments except Architecture department, earning minimum GPA 3.75 at the end of each academic level for level 1 to 3
- For graduating students of all departments except Architecture department earning minimum CGPA 3.75 considering results of entire program (i.e. level 1 to 4)
- For Architecture department students earning minimum GPA 3.50 at the end of each academic level for level 1 to 4
- For graduating students of Architecture department earning minimum CGPA 3.50 considering results of entire program (i.e. level 1 to 5)

MIST Scholarships

- MIST Scholarship is awarded to regular students ranking 1st to 5th in CE, CSE, EECE & ME departments and 1st to 3rd in other departments, recognizing their academic excellence in each term final examination.

Recipients of Osmany Memorial Gold Medal

2022

Flt Lt Shashwata Sarker Dip
AE Dept
CGPA 4.00

2023

Sadman Saif
EECE Dept
CGPA 3.97

2024

Ag Lt M Hasin Ishmam Jeet
NAME Dept
CGPA 3.98

ELIGIBILITY FOR ADMISSION TEST

Bangladeshi Students

Minimum qualifications to take part in the admission test are as follows:

a. SSC Examination (or Equivalent) The applicant must have passed the examination in Science Group obtaining a minimum GPA of 4.00 (without fourth subject) on the scale of 5.0. Only the applicants who passed SSC or Equivalent Examination in Corresponding current and previous one year can apply.

b. HSC Examination (or Equivalent) The applicants passed in current and previous one year must obtain minimum total grade point 18 in four subjects (Mathematics, Physics, Chemistry and English) with a minimum grade point of 4.00 in each of Mathematics, Physics and Chemistry.

c. GCE ('O' and 'A' Levels or Equivalent)

1) The applicant who passed in current and previous one year must have qualified with minimum 'B' grade in five subjects including Mathematics, Physics, Chemistry, and English in GCE 'O' Level.

2) The applicant who passed in current and previous one year must have minimum three 'B' grades in Mathematics, Physics, and Chemistry in GCE 'A' Level.

d. Applicants interested in Biomedical Engineering must have Biology in **HSC** or equivalent level with a minimum grade point of **'A-' / GCE 'A'** or equivalent level with a minimum grade point of '**C**'.

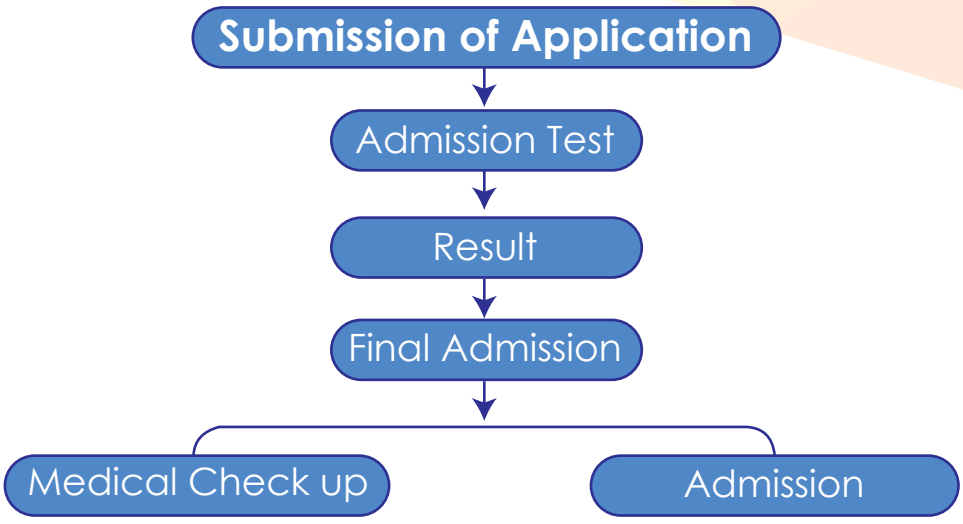
Foreign Students

Maximum 3% of overall vacancies available will be kept reserved for the foreign students and will be offered to foreign countries through Armed Forces Division (AFD) of the Government of the Peoples Republic of Bangladesh. Applicants must fulfill the following requirements:

- Educational qualifications as applicable for Bangladeshi students or equivalent.
- Must have security clearance from respective Embassy/ High Commission in Bangladesh.
- Sex: Male and Female.

Note: In the event of non-availability of foreign students, the vacancies will be filled up by Bangladeshi civil students as per merit.

SEQUENCE OF ADMISSION



Documents are to be Submitted During Admission

a. Original copies of certificates and mark sheet of SSC or Equivalent examination.

b. Original copies of certificate and mark sheet of HSC or Equivalent examination.

c. Three copies of recent passport size colored photograph of the candidate duly attested by class-I gazetted officer.

d. Character certificate from the head of the last institute attended.

e. Nationality Certificate from proper authority / Birth certificate / National ID Card.

f. For the Children of Freedom Fighters, original copies of Freedom Fighter certificate of parents, issued by the Ministry of Liberation War Affairs, People's Republic of Bangladesh.

g. For Tribal Citizen, original certificate as a tribal citizen issued by local UP Chairman and countersigned by concerned District Commissioner (DC).

h. For Children of Military Personnel original certificate of authenticity, issued by respective Commanding Officers (For serving parents); and by CORO/ Naval Secretary/ Air Secretary/ Record Office/ Drafting Office (For retired parents).

Department Allotment

Departments will be allotted on the basis of combined merit position. Individual choice for selection of departments will be given preference as far as possible.

Guardian's Consent

In the admission form selected civil candidates and their parents or guardians have to render consent certificate accepting terms and conditions as required by MIST authority from time to time.

MIST STUDENT WITHDRAWAL POLICY

Introduction

1. Military Institute of Science & Technology (MIST), a pioneer technical institution of Bangladesh Armed Forces conducts undergraduate courses of various engineering disciplines, like, Civil Engineering (CE), Computer Science and Engineering (CSE), Electrical, Electronic and Communication Engineering (EECE), Mechanical Engineering (ME), Aeronautical Engineering (AE), Naval Architectures and Marine Engineering (NAME), Nuclear Science and Engineering (NSE), Environmental, Water Resources, and Coastal Engineering (EWCE), Biomedical Engineering (BME), Architecture (Arch), Petroleum & Mining Engineering (PME) and Industrial & Production Engineering (IPE) . Since its beginning, all academic programs (including the MBA and Executive MBA programs) of MIST had been affiliated with the University of Dhaka (DU). On 05 June, 2008 the Bangladesh University of Professionals (BUP) came into existence as a new public university of the country. Since then all academic programs of MIST were disengaged from DU and have been affiliated with BUP. Again, the Management Division (BBA, MBA and Executive programs) of MIST was disengaged from MIST and remained with BUP in faculty of Business studies (FBS). Now, examinations of all engineering programs of MIST are held under the authority of BUP.

2. From the academic session 2017-18, MIST has introduced a course system for undergraduate studies. The rules and regulations for administering undergraduate curriculum through the Course System have been applicable to students henceforth. This new course system has been introduced with an aim of creating a continuous, even and consistent workload throughout the term for the students. This new curriculum does not demand the same rate of academic progress from all students for obtaining the degree but only lays down the pace expected of a normal student. A student whose background or capacity for assimilation is lower, he/she is permitted to complete the program at a slower pace by studying a fewer number of courses during a given term, subject to a minimum course load.

3. A definite standard of education and general discipline **is** followed in every level of the program. The unsuccessful students are withdrawn from the institute.

Definitions

4. **Definition of the terms:**

   a. **Permanent Withdrawal** The term `Permanent Withdrawal' will imply a complete/ permanent discontinuity from any course/program of the institute.

   b. **Temporary Withdrawal** The term `Temporary Withdrawal' means that the student has been allowed by the Academic Council, MIST to discontinue temporarily from any course/program for a definite period. The student, so withdrawn, may re-enter the course as per terms and conditions set by the authority .

   c. **Permanent Expulsion** The term `Permanent Expulsion' means expulsion permanently from the institution on disciplinary ground. A student, if expelled permanently will never be allowed to re-enter the course or similar program in MIST and be subjected to other terms and conditions as set by the authority while approving the permanent expulsion order.

d. Temporary Expulsion The term `Temporary Expulsion means expulsion from an academic course/program for a certain period on disciplinary ground. A student, if expelled temporarily, may be allowed to re-enter the course/program on expiry of the punishment period and on fulfilment of other terms and conditions (if any) as set by the authority while approving the temporary expulsion order.

5. The undergraduate (B.Sc) Engineering programs for all engineering disciplines are planned for 04 regular levels, comprising of 08 regular terms, for Architecture program it is planned for 5 & regular levels, comprising of 10 regular terms. It is expected that all students will earn degree by clearing all the offered courses in the stipulated time. In case of failure the following policies will be adopted:

a. Students failing in any course/subject will have to clear/pass the said course/ subject by appearing it in supplementary examination as per examination policy.

b. Students may also retake the failed subject/course in regular term as per Examination policy.

c. Maximum grading for supplementary examination etc. of failed subjects will be B+ as per examination policy.

d. If any student fails in a course, he can clear the course retaking it 2nd time or, he can clear the examination appearing at the supplementary examination as well. Any one fails twice in a course, can only retake it in the regular term for appearing third time. But anyone fails even after appearing third time; he/she is required to take approval of MIST Academic Council for appearing 4th time or 5th(last) in a course while need to pay extra financial penalty for both time decided by a standing committee. If he/ she fails even 5th time in a course, will not be allowed to appear anymore in this same course.

e. In case of sickness, which leads to missing of more than 40% classes or miss term final examination (supported by requisite medical documents), students may be allowed to withdraw temporarily from that term and repeat the whole level with the regular level in the next academic session, subject to the approval of Academic Council, MIST. However, he/she has to complete the whole undergraduate program within 06 (six) academic years (for Architecture 07 academic years) from the date of his/her registration.

f. Minimum credit requirement for the award of a bachelor's degree in Engineering (B.Sc Engg) and Architecture (B.Arch) is decided by the respective Department as per existing rules. However the minimum CGPA requirement for obtaining a bachelor degree in engineering and Architecture is 2.20.

g. Under all Conditions, students have to complete the whole undergraduate Program within 06 (six) academic years for B. Sc Engineering and 07 (seven) years for Bachelor of Architecture from the date of registration.

h. All other terms and condition of MIST Examination Policy remain valid.

EXPULSION/ WITHDRAWAL ON DISCIPLINARY GROUND

6. **Unfair Means** Adopting of unfair means may result in expulsion of a student from the program and so from the institution. The Academic Council of MIST will authorize such expulsion on the basis of recommendation of the Disciplinary Committee, MIST and as per policy approved by the affiliating university (BUP). Following would be considered as unfair means adopted during examinations and other contests:
   a. Communicating with fellow students for obtaining help in the examinations.
   b. Copying from another student's script/report/paper.
   c. Copying from desk or palm of a hand or from other incriminating documents/ electronic gadgets.
   d. Possession of any incriminating document/ electronic gadgets whether used or not.
7. **Influencing Grades** MIST Authority may expel/withdraw any student for approaching directly or indirectly in any form to influence a teacher or MIST authority for grades.
8. **Other Indiscipline Behaviour** MIST Authority may withdraw/expel any student on disciplinary ground, if any form of indiscipline or unruly behaviour is seen from him/her which may disrupt the academic environment/program or is considered detrimental to MIST's image.
9. **Immediate Action by the Disciplinary Committee of MIST** The Disciplinary Committee, MIST may take immediate disciplinary action against any student of the institution. But later the approval of BUP has to be taken. In case of withdrawal/expulsion, the matter will have to be referred later to the next Academic Council, MIST.

WITHDRAWAL ON OWN ACCORD

10. **Permanent Withdrawal** A Student who has already completed some courses and has not performed satisfaction may apply for a permanent withdrawal.
11. **Temporary Withdrawal** A student, if he/she applies, may be allowed to withdraw temporarily from the program, subject to approval of Academic Council of MIST, but he/she has to complete the whole program within 06 (six) academic years (for Architecture 07 academic years) from the date of his/her registration.

STUDENTS' DRESS CODE

Civil students are to wear dress with displayed identity card as per "Dress Code" prescribed by MIST authority. Military students will put on uniform as per dress regulation of respective services. Dress code for civil student is as follows:

Male Student	
Summer	**Winter**
Light Grey coloured full sleeve shirt (tucked in), Light Black coloured full pant, Black Oxford shoes and Black socks.	Light Grey coloured full sleeve shirt (tucked in), Light Black coloured full pant, Blue jersey pull over (V-necked) (Normal), MIST Blazer (Formal), Black Oxford shoes and Black socks.

Female Student	
Summer	**Winter**
Ash coloured three quarter sleeve Kamiz, White coloured Sallowar and Dopatta, Black ladies shoes and socks/ Black sandal shoes.	Ash coloured three quarter sleeve Kamiz, White coloured Sallowar and Dopatta, Navy Blue cardigan (Normal), MIST Blazer (Formal), Black ladies shoes and socks/ Black sandal shoes.

WINTER (Formal)

WINTER (Regular)

SUMMER

THURSDAY DRESS (Smart Casual)

RULES AND REGULATIONS FOR UNDERGRADUATE PROGRAM AS PER COURSE SYSTEM

Introduction

1. MIST has introduced course system for undergraduate studies from the academic session 2017-18. Therefore, the rules and regulations mentioned below are applicable to students for administering undergraduate curriculum through the Course System. This has been introduced with an aim of creating a continuous, even and consistent workload throughout the term for the students.

The Course System

2. The salient features of the Course System are as follows:
   a. Number of theory courses will be generally 06 or as per syllabus in each term. However, with the recommendation of course coordinator and Head of the Department, Commandant MIST may allow up to 07 courses in exceptional cases if department can accommodate within 24 cr hr.
   b. Students will not face any level repeat for failing.
   c. Students will get scope to improve their grading.
   d. Introduction of more optional courses to enable the students to select courses according to their individual needs and preferences.
   e. Continuous evaluation of students' performance.
   f. Promotion of student-teacher interaction and contact.
   3. Beside the professional courses pertaining to each discipline, the undergraduate curriculum gives a strong emphasis on acquiring thorough knowledge in the basic sciences of mathematics, physics and chemistry. Due importance is also given on the study of several subjects in humanities and social sciences.
4. The first two years of bachelor's degree programs generally consist of courses in basic engineering, general science and humanities subjects; while the third and subsequent years focus in specific disciplines.

Number of Terms in a Year

5. There will be two terms Spring Term (Jan-Jun) and Fall Term (Jul-Dec) in an academic year.

Duration of Terms

6. The duration of each of Spring Term and Fall Term (maximum 22 weeks) may be as under:

Ser	Events	Durations
1.	Classes before Mid Term	7 weeks
2.	Mid Term Vacation	1 week
3.	Classes after Mid Term	7 weeks
4.	Makeup Classes and Preparatory leave	2/3 weeks
5.	Term Final Examination	2/3 weeks
6.	Term End Vacation	1/2 week

Course Pattern and Credit Structure

7. The undergraduate program is covered by a set of theoretical courses along with a set of laboratory (sessional) courses to support them.

Course Designation System

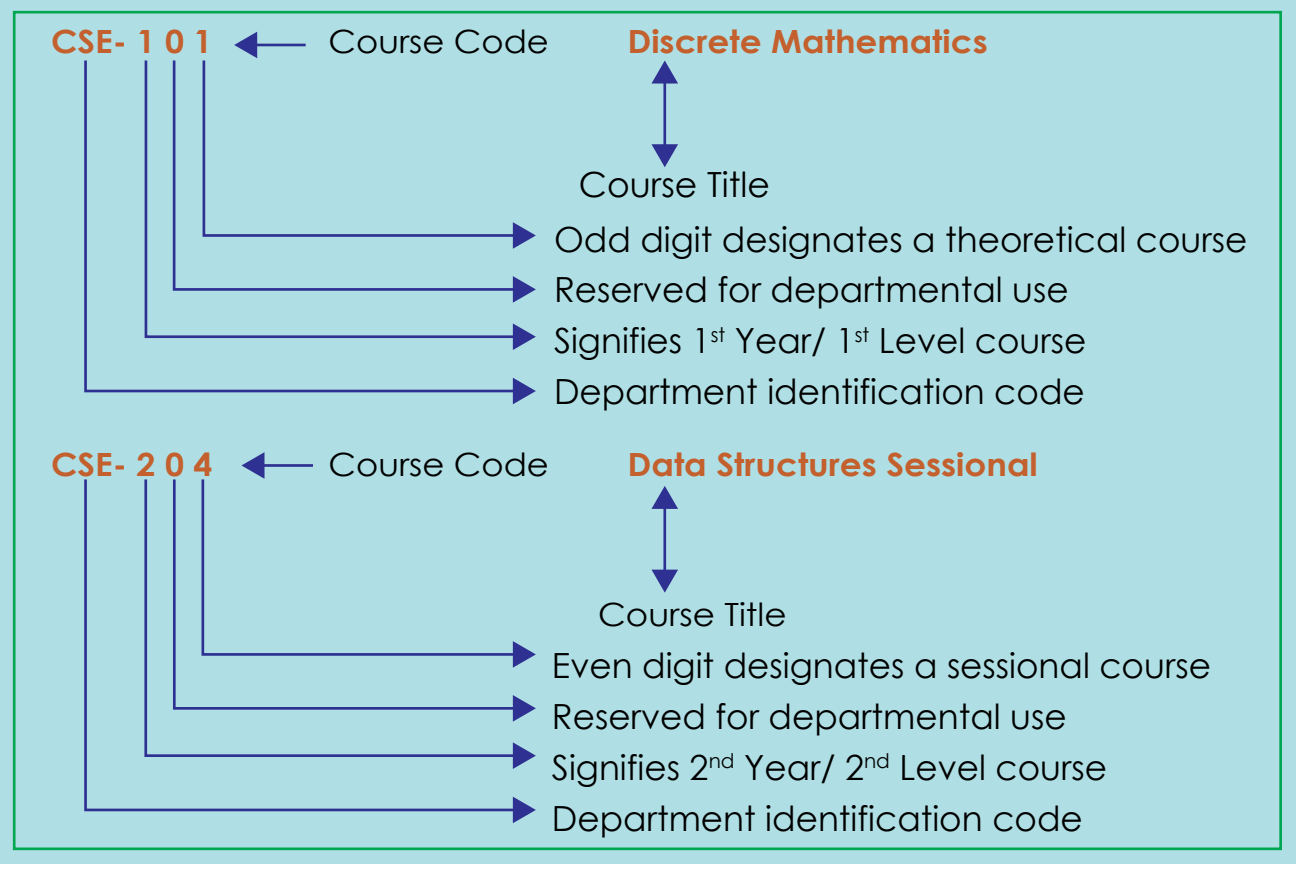
8. Each course is designated by a maximum of three/four letter code identifying the department offering the course followed by a three-digit number having the following interpretation:

a. The first digit corresponds to the year/level in which the course is normally taken by the students.

b. The second digit is reserved for departmental use. It usually identifies a specific area/ group of study within the department.

c. The last digit is an odd number for theoretical courses and an even number for sessional courses.

9. The course designation system is illustrated as follows:



Assignment of Credits

10. The assignment of credits to a theoretical course follows a different rule from that of a sessional course.

    a. Theoretical Courses: One lecture per week per term is equivalent to one credit.

    b. Sessional Courses: Credits for sessional courses is half of the class hours per week per term.

Credits are also assigned to project and thesis work taken by the students. The amount of credits assigned to such work varies from one discipline to another.

Types of Courses

11. The types of courses included in the undergraduate curricula are divided into the following groups:

    a. **Core Courses:** In each discipline, a number of courses are identified as core courses, which form the nucleus of the respective bachelor's degree program. A student has to complete all the designated core courses of his/her discipline.

    b. **Prerequisite Courses:** Some of the core courses are identified as prerequisite courses for a specific subject.

    c. **Optional Courses:** Apart from the core courses, the students can choose from a set of optional courses. A required number of optional courses from a specified group have to be chosen.

Course Offering and Instruction

12. The courses to be offered in a particular term are announced and published in the Course Catalog along with the tentative Term Schedule before the end of the previous term. The courses to be offered in any term will be decided by Board of Undergraduate Studies (BUGS) of the respective department.

13. Each course is conducted by a course teacher who is responsible for maintaining the expected standard of the course and for the assessment of students' performance. Depending on the strength of registered students (i.e. on the number of students) enrolled for the course, the teacher concerned might have course associates and Teaching Assistants (TA) to aid in teaching and assessment.

Teacher-Student Interaction

14. The new course system encourages students to come in close contact with the teachers. For promotion of a high level of teacher-student interaction, each student is assigned to an adviser and the student is free to discuss all academic matters with his/her adviser. Students are also encouraged to meet any time with other teachers for help and guidance in academic matters. However, students are not allowed to interact with teachers after the moderation of questions.

Student Adviser

15. One adviser is normally appointed for a group of students by the BUGS of the concerned department. The adviser advises each student about the courses to be taken in each term by discussing the academic program of that particular term with the student.

16. However, it is also the student's responsibility to keep regular contact with his/her adviser who will review and eventually approve the student's specific plan of study and monitor subsequent progress of the student.

17. For a student of second and subsequent terms, the number and nature of courses for which he/she can register is decided on the basis of academic performance during the previous term. The adviser may permit the student to drop one or more courses based on previous academic performance.

Course Registration

18. Any student who uses classroom, laboratory facilities or faculty-time is required to register formally. Upon admission to the MIST, students are assigned to advisers. These advisers guide the students in choosing and registering courses.
19. **Registration Procedure.** Academic Wing will commence a term (Spring/Fall) as per the academic calendar. At the commencement of each term, each student is required to register for courses in consultation with and under the guidance of his/her academic adviser. The date, time and venue of registration are announced in advance by the Registrar's Office. Summary of course registration process is as follows:
    - **a.** GSO-2 (Coord, Prog) of the respective department will open courses according to the approved syllabus and assign advisers to student groups in the Education Management Software (EMS). After consulting with respective adviser, the student will select the courses. Students can add/drop the course with the consent of the advisers within the stipulated timeline before forwarding the student list to the Head of Department (HoD).
    - **b.** The HoD will forward the lists to the Registrar's office, and the term fee will be generated (except military student) in the Education Management Software (EMS). Registration is complete after payment.
20. **Pre-conditions for Registration.**
    - **a.** For first year students, department-wise enrollment/admission is mandatory prior to registration. At the beginning of the first term, an orientation program will be conducted for them where they are handed over with the registration package on submission of the enrolment slip.
    - **b.** Any student, other than the new batch, with outstanding dues to the MIST or a hall of residence is not permitted to register. Each student must clear their dues and obtain a clearance certificate, upon production of which, he/she will be given necessary Course Registration Forms to perform course registration.
    - **c.** A student is allowed to register in a particular course subject to the class capacity constraints and satisfaction of pre-requisite courses. However, even if a student fails in a pre-requisite course in any term, the concerned department (BUGS) may allow him/her to register for a course which depends upon the pre-requisite course provided that his/her attendance and performance in the continuous assessment of the mentioned pre- requisite course is found to be satisfactory.
21. **Registration Deadline.** Each student must register for the courses to be taken before the commencement of each term. Late registration is permitted up to the 2nd week of classes. Late registration after this date will not be accepted unless the student submits a written application to the registrar through the concerned Head of the department explaining the reasons for delay. Acceptable reasons may be medical problems with supporting documents from the Medical Officer of MIST or some other academic commitments that prohibit enrollment prior to the last date of registration.
22. **Penalty for Late Registration.** Students who fail to register during the designated dates for registration are charged a late registration fee of Tk. 200.00 (Two hundred only) per credit hours. Under no circumstances, the penalty for late registration will be waived.

Limits on the Credit Hours to be taken

23. A student should be enrolled for at least 15 credit hours and is allowed to take a maximum of 24 credit hours. Relaxation on minimum credit hours may be allowed. A student must enroll for the sessional courses prescribed in a particular term within the allowable credit hour limits.

24. In special cases where it is not possible to allot the minimum required 15 credit hours to a student, the concerned department (BUGS) will recommend for the approval of the Commandant, a lesser number of credit hours to suit individual requirements. After obtaining necessary approval from the Commandant, respective department will dispatch the final list to the Office of the Controller of Examination informing Academic wing to override the minimum credit hour in the EMS accordingly. Only graduating students may be allowed to register less than 15 Cr Hr without approval of Commandant. In special case, if any graduating student needs more than 24 Cr Hr, BUGS may recommend up to 27 Cr Hr for the permission of the Commandant. A list of all such cases to be forwarded to Registrar's Office, ICT Directorate and Office of the Controller of Examinations by the respective department.

Course Add/Drop

25. A student has some limited options to add or drop courses from the registration list. Addition of courses is allowed only within the first two weeks of a regular term. Dropping a course is permitted within the first four weeks of a regular term. Add or drop is not allowed after registration of courses for Supplementary-I and Supplementary-II examination.

26. Any student willing to add or drop courses has to fill up a Course Adjustment Form. This also has to be done in consultation with and under the guidance of the student's respective adviser. The original copy of the Course Adjustment Form has to be submitted to the Registrar's Office, where the required numbers of photocopies are made for distribution to the concerned adviser, Head, Dean, Controller of Examinations and the student.

27. All changes must be approved by the adviser and the Head of the concerned department. The Course Adjustment Form has to be submitted after being signed by the concerned persons.

Withdrawal from a Term

28. If a student is unable to complete the Term Final Examination due to serious illness or serious accident, he/she may apply to the Head of the degree awarding department for total withdrawal from the term before commencement of term final examination. However, application may be considered during term final examination in special case. The application must be supported by a medical certificate from the Medical Officer of MIST. The Academic Council will take the final decision about such applications. However, the total duration for graduation will not exceed 6 academic years.

The Grading System

29. The total performance of a student in a given course is based on a scheme of continuous assessment for theory courses. This continuous assessment is made through a set of quizzes, class tests, class evaluation, class participation, homework assignment and a term final examination. The assessments for sessional courses are made by evaluating performance of the student at work during the class, viva-voce during laboratory hours and quizzes. Besides that, at the end there will be a final lab test. Each course has a certain number of credits, which describes its corresponding weightages. A student's performance is measured by the number of credits completed satisfactorily and by the weighted average of the grade points earned. A minimum grade point average (GPA) is essential for satisfactory progress. A minimum number of earned credits also has to be acquired in order to qualify for the degree.

Letter grades and corresponding grade points will be given as follows:

Numerical Markings	Grade	Grade Points
80% and above	A+	4.00
75% to below 80%	A	3.75
70% to below 75%	A-	3.50
65% to below 70%	B+	3.25
60% to below 65%	B	3.00
55% to below 60%	B-	2.75
50% to below 55%	C+	2.50
45% to below 50%	C	2.25
40%to below 45%	D	2.00
below 40%	F*	0.00
	AB	Absent
	DC	Dis-collegiate
	VW	Voluntary Withdrawn
	X	Project/ Thesis Continuation
	E	Expelled
	S	Satisfactory

* Subject in which the student gets F grade shall not be regarded as earned credit hours for the calculation of Grade Point Average (GPA).

Distribution of Marks

30. **Theory.** Forty percent (40%) of marks of a theoretical course shall be allotted for continuous assessment, i.e. assignments, class tests, pop quizzes, observations, projects and mid-term assessment. These marks must be submitted to Office of the Controller of Exam before commencement of final exam. The rest of the marks will be allotted to the Term Final Examination. The duration of final examination will be three (03) hours. The scheme of continuous assessment that a particular teacher would follow for a course will be announced on the first day of the classes. Distribution of marks for a given course per credit is as follows:

Class Performance	5%
Class Attendance	5%
Class Test/ Assignment	20%
Mid Term Assessment (Exam/ Project)	10%
Final Examination (Section A & B)	60%
Total	**100%**

Basis for awarding marks for class Attendance will be as follows:

Class Attendance	Marks
80% and Above	100%
75% to less than 80%	80%
70% to less than 75%	70%
65% to less than 70%	60%
Below 65%	0%

Note:

a. In final exam, each section can be used for achieving not more than two course outcomes (COs). The remaining COs should be attained from mid-term assessment or class tests. Course teacher has to inform the student the beginning of the terms.

b. Course teacher of a particular course has to inform the department whether he/she wants to assess mid-term through exam or project within first two weeks of beginning of a term. The duration of mid-term examination should not be more than 50 minutes which has to be conducted in between 6th to 9th week of a semester. If mid-term assessment is done through project, then there should be project report and presentation.

c. The weightage of class performance can be assessed through checking attentiveness during classes or arranging unnoticed pop quizzes.

d. The number of class tests shall be n for 3.0 and above credit courses and (n-1) shall be considered for grading where n is the number of credits of the course. However, for courses having credits below 3.0, the considered class tests shall be 2 out of 3.

e. All class test will carry 20 marks each. Exam software system will finally convert these achieved marks into total class test marks as per credit hour. i.e for n=1(20), n=2 (40), n=3 (60), n=4(80) etc.

f. Irrespective of the result of the continuous assessment (class performance, class test, mid-term assessment), a student has to appear in the final examination (where applicable) for qualifying/passing the concern course/ subject.

31. Laboratory/ Sessional/ Practical Examinations Sessional courses are designed and conducted by the concerned departments. Examination on Laboratory/ sessional/ practical subjects will be conducted by the respective department before the commencement of term final examination. The date of practical examination will be fixed by the respective department. Students will be evaluated in the sessional courses on the basis of the followings.

a. Conduct of lab test/ class performance	25%
b. Report Writing/ Programming	15%
c. Mid Term Evaluation (exam/ project/ assignment)	20%
d. Final Evaluation (exam/ project/ assignment)	30%
e. Viva Voce/ Presentation	10%
Total	**100%**

32. **Laboratory/ Sessional Course in English** The distribution will be as under:

a. Class performance/observation	10%
b. Written Assignment	15%
c. Oral Performance	25%
d. Listening Skill	10%
e. Group Presentation	30%
f. Viva Voce	10%
Total	**100%**

33. **Class Attendance** Class Attendance may be considered as a part of continuous assessment. No mark will be allotted for attending class.

Collegiate, Non-collegiate and Dis-collegiate

34. Students having class attendance of **80% or above in individual subject will be treated as collegiate and less than 80% and up to 65% will be treated as non-collegiate in that subject**. The non-collegiate student(s) may be allowed to appear in the examination subject to payment of non-collegiate fee/fine of an amount fixed by MIST/BUP. Students having class attendance **below 65%will be treated as dis-collegiate** and will not be allowed to appear in the examination and treated as fail. But in a special case such students may be allowed to appear in the examination with the permission of Commandant and it should be appraised in the Academic Council.

Calculation of CGPA

35. Grade Point Average (GPA) is the weighted average of the grade points obtained of all the courses passed/ completed by a student. For example, if a student passes/ completes n courses in a term having credits of C1, C2, ...,Cn and his grade points in these courses are G1, G2, ...Gn respectively, then

$$\text{GPA} = \frac{\text{Grade Points earned in the semester}}{\text{Credits completed in the semester}}$$

$$\frac{\text{Summation of (Credit hours in a course *Grade Points earned in that course)}}{\text{Total number of credit hours completed}}$$

$$= \frac{\sum_{i=1}^{n} Ci * Gi}{\sum_{i=1}^{n} Ci}$$

36. The Cumulative Grade Point Average (CGPA) is the weighted average of the GPA obtained in all the terms passed/completed by a student. For example, if a student passes/ completes n terms having total credits of TC1, TC2, ... , TCn and his GPA in these terms are GPA1, GPA2,... , GPAn, respectively then

$$CGPA = \frac{\sum_{i=1}^{n} TCi * GPAi}{\sum_{i=1}^{n} TCi}$$

Numerical Example

Suppose a student has completed nine courses in a term and obtained the following grades:

Course	Credit Ci	Grade Points	Gi	Ci*Gi
EECE-163	3.00	A	3.75	11.25
EECE-164	0.75	A+	4.00	3.00
MATH-141	3.00	A-	3.50	10.50
PHY-103	3.00	B+	3.25	9.75
HUM-101	3.00	A	3.75	11.25
HUM-102	1.50	A	3.75	5.625
CSE-101	3.00	A	3.75	11.25
CSE-103	3.00	A-	3.50	10.50
CSE-104	1.5	B+	3.25	4.875
Total	21.75			78.00

$$GPA = \frac{78.00}{21.75} = 3.59$$

Suppose a student has completed four terms and obtained the following GPA:

Level	Term	Earned Credit Hours	Earned GPA	TCi*GPAi
		Tci	GPAi	
1	I	21.75	3.75	81.5625
1	II	20.75	3.61	74.9075
2	I	19.50	3.21	62.595
2	II	21.00	2.98	62.58
Total		83.00		281.645

$$CGPA = \frac{281.645}{83} = 3.39$$

Impacts of Grade Earned

37. The courses in which a student has earned a 'D' or a higher grade will be counted as credits earned by him/her. Any course in which a student has obtained an 'F' grade will not be counted towards his/her earned credits or GPA calculation. However, the 'F' grade will remain permanently on the Grade Sheet and the Transcript.

38. A student who obtains an 'F' grade in a core course will have to repeat that particular course. However, if a student gets an 'F' in an optional course, he/she may choose to repeat that course or take a substitute course if available. When a student will repeat a course (or take a substitute course) in which he/she has previously obtained an 'F', he/she will be eligible to obtain a maximum B+ grade in that repeated course or substitute course. However, if he/she take the repeated course or substitute course fourth time, he/she will not be eligible to obtain more than B grade.

39. If a student obtains a grade lower than 'B+' in a particular course he/she will be allowed to repeat the course only once for the purpose of grade improvement. However, he/she will not be eligible to get a grade better than 'B+' for an improvement course.

40. A student will be permitted to repeat for grade improvement purposes a maximum of 6 courses in BSc. Engineering programs and a maximum of 7 courses in B. Arch. program.

41. If a student obtains a 'B+' or a better grade in any course he/she will not be allowed to repeat the course for the purpose of grade improvement.

Classification of Students

42. At MIST, regular students are classified according to the number of credit hours completed/earned towards a degree. The following classification applies to all the students:

Level	Credit Hours Earned	
	Engineering/URP	Architecture
Level 1	0.0 to 36.0	0.0 to 34.0
Level 2	More than 36.0 to 72.0	More than 34.0 to 72.0
Level 3	More than 72.0 to 108.0	More than 72.0 to 110.0
Level 4	More than 108.0	More than 110.0 to 147.0
Level 5		More than 147.0

43. However, before the commencement of each term all students other than new batch are classified into three categories:

a. **Category-1:** This category consists of students who have passed all the courses described for the term. A student belonging to this category will be eligible to register for all courses prescribed for the upcoming term.

b. **Category-2:** This category consists of students who have earned a minimum of 15 credits but do not belong to category 1. A student belonging to this category is advised to take at least one course less since he might have to register for one or more backlog courses as prescribed by his/her adviser.

c. **Category-3:** This category consists students who have failed to earn the minimum required 15 credits in the previous term. A student belonging to this category is advised to take at least two courses less than a category 1 student subject to the constraint of registering at least 15 credits. However, he will also be required to register for backlog courses as prescribed by the adviser.

44. **Definition of Graduating Student** Graduating students are those students who will have ≤ 24 credit hour for completing the degree requirement.

Performance Evaluation

45. The performance of a student will be evaluated in terms of two indices, viz. Term Grade Point Average and Cumulative Grade Point Average which is the grade average for all the terms completed.

46. Students will be considered to be making normal progress toward a degree if their Cumulative Grade Point Average (CGPA) for all work attempted is 2.20 or higher. Students who regularly maintain a term GPA of 2.20 or better are making good progress toward the degrees and are in good standing with MIST. Students who fail to maintain this minimum rate of progress will not be in good standing. This can happen when any one of the following conditions exists.

    a. The term GPA falls below 2.20.
    b. The Cumulative Grade Point Average (CGPA) falls below 2.20.
    c. The earned number of credits falls below 15 times the number of terms attended.

47. All such students can make up their deficiencies in GPA and credit requirements by completing courses in the subsequent term(s) and backlog courses, if there are any, with better grades. When the minimum GPA and credit requirements are achieved the student is again returned to good standing.

Minimum Earned Credit and GPA Requirement for Obtaining Degree

48. The requirements for award of Undergraduate Degree are as follows:

    a. Minimum credit hour requirements for the award of Bachelor's Degree in engineering (BSc Engg) and architecture (B Arch) will be decided by the respective department (BUGS).The syllabus of all BSc engineering prog must be of minimum 160 credit hours and for architecture prog minimum 189 credit hours. A student must earn minimum credit hour set in the syllabus by the concerned department for qualifying Bachelor's Degree within the time limit for completion of Bachelor's Degree.

    b. The minimum CGPA requirement for obtaining a Bachelor's Degree in engineering and architecture is 2.20.

    c. Student must appear at the final examination of all the required courses asper syllabus of the program.

49. A student may take additional courses with the consent of his/her Adviser in order to raise CGPA, but he/she may take a maximum of 15 such additional credits in engineering and 18 such additional credits in architecture beyond respective credit-hour requirements for Bachelor's degree during his/her entire period of study.

Application for Graduation and Award of Degree

50. A student who has fulfilled all the academic requirements for Bachelor's degree will have to apply to the Controller of Examinations through his/her Adviser for graduation. Provisional Degree will be awarded by BUP on completion of credit and GPA requirements.

a. A student who has fulfilled all the academic requirements for Bachelor's Degree will have to apply to the Controller of Examinations through his/her Adviser for graduation. Provisional Degree will be awarded by BUP on completion of credit and GPA requirements.

b. Students who are eligible for graduation cannot appear at the improvement exam. However, those graduating in the Fall term willing to improve their grade may apply for the Supplementary-I (improvement) exam only once. The respective department should forward the list to the Controller of Examinations within 4 days of the tabulation generation (in the EMS) for the Fall term.

Time Limits for Completion of Bachelor's Degree

51. A student must complete his studies within a maximum period of six years for engineering and seven years for architecture bachelor's degree.

Attendance, Conduct and Discipline

52. MIST has strict rules regarding the issues of attendance in class and discipline.

53. **Attendance**. All students are expected to attend classes regularly. MIST believes that attendance is necessary for effective learning. The first responsibility of a student is to attend classes regularly and one is required to attend the classes as per MIST rules.

54. **Conduct and Discipline.** During their stay in MIST all students are required to abide by the existing rules, regulations and code of conduct. Students are strictly forbidden to form or be members of student organization or political party, club, society etc., other than those set up by MIST authority in order to enhance student's physical, intellectual, moral and ethical development. Zero tolerance in regards of sexual abuse and harassment in any forms and drug abuse and addiction are strictly observed in the campus.

Teacher-Student Interaction

55. The academic system in MIST encourages students to come in close contact with the teachers. For promotion of high level of teacher-student's interaction, a course coordinator (CC) is assigned to each course. Students are free to discuss with CC about all academic matters. Students are also encouraged to meet other teachers any time for help and guidance for academic matters. Heads of the departments, Director of Administration, Director of Students Welfare (DSW), Dean and Commandant address the students at some intervals. More so, monthly Commandant's Parade is organized in MIST where all faculty members, staff and students are formed up, thereby increasing teacher-student interaction.

Absence during a Term

56. A student should not be absent from quizzes, tests, etc. during the term. Such absence will naturally lead to reduction in points/marks, which count towards the final grade. Absence in the Term Final Examination will result in an F grade in the corresponding course. A student who has been absent for short periods, up to a maximum of three weeks due to illness, should approach the course teacher(s) or the course coordinator(s) for make-up quizzes or assignments immediately upon return to classes. Such request has to be supported by medical certificate from competent authority (e.g. CMH/MIST Medical Officer).

Recognition of Performance

57. As recognition of performance and ensure continued studies MIST awards medals, scholarships and stipends will be given as per existing rules and practices.

Types of Different Examination

58. Following different types of final Examinations will be conducted in MIST to evaluate the students of Undergraduate Programs:

a. **Term Final Examination:** At the end of each normal term (after 22wk or so), Term Final Examination will be held. Students will appear in the Term Final Examination for all the theory courses they have taken in the Term.

b. **Supplementary Examination:** It will take place twice in a year. Supplementary-I is defined as provision of giving exam in the first week of Spring Term (Jan-Jun) / Fall Term (Jul-Dec) end break and Supplementary-II in the first week of Fall Term (Jul-Dec) / Spring Term (Jan-Jun) end break, respectively. Students will be allowed to register for a maximum of two theory courses (Failed/Improvement) in Supplementary-I and maximum of one theory course (Failed/Improvement) in Supplementary-II. Only graduating students will be allowed to register for a maximum of three theory courses (Failed/Improvement) in Supplementary-I and maximum of two theory course (Failed/Improvement) in Supplementary-II.

c. **Improvement Examination:** It will be taken during Supplementary-I and Supplementary-II Examination. Questions will be same as the question of the regular examination of that Supplementary Examination (if any). Student can take maximum two subjects at a time (two subjects in supplementary-I and one subject in supplementary-II) and maximum 6 subjects in the whole academic duration. If a student obtains a grade lower than 'B+' in a course, he/she will be allowed to repeat the course only once for grade improvement. However, he/she will not be eligible to get a grade better then 'B+' for an improvement course. Among the previous result and improvement examination result, best one will be considered as final result for an individual student. However, performance of all examination i.e. previous to improvement examination shall be reflected in the transcript.

Rules of Different Examinations

59. **Term Final Examination.** Following rules to be followed:

    a. Registration to be completed before commencement of the Term. A student has to register his desired courses paying registration, examination fee and other related fees.

    b. Late registration will be allowed without penalty within first two weeks of the term.

c. Within 1st two weeks of a term a student can Add/Drop course/courses. To add a course, in the 3rd week, one has to register the course by paying additional fees. To drop a course, one has to apply within three weeks and paid fees will be adjusted/ refunded. If anyone wants to drop a course after three weeks and within 4 weeks, that will be permitted but paid fees will not be refunded in that case.

d. Registrar office will finalize registration of all courses within 7 (seven) weeks, issue registration slip and that will be followed by issuing Admit Card.

e. Term Final Examination to be conducted in the 18-20th week of the term as per approved Academic Calendar.

60. **Supplementary Examination.** Following rules are to be followed:

a. Supplementary-I is defined as provision of giving exam in the first week of Spring Term (Jan-Jun) / Fall Term (Jul-Dec) end break and Supplementary-II in the first week of Fall Term (Jul-Dec) / Spring Term (Jan-Jun) end break, respectively.

b. Students will be allowed to register for a maximum of two theory courses (Failed/ Improvement) in Supplementary-I and maximum of one theory course (Failed/ Improvement) in Supplementary-II. However, with the approval of Commandant, in special circumstances, departments may allow students to register for a maximum of one theory courses (Failed/Improvement) in Supplementary-I and maximum of two theory courses (Failed/Improvement) in Supplementary-II. Total courses to register by a student in supplementary examination in a year cannot be more than three,

c. No class will be conducted.

d. 40% marks will be considered from the previous exams.

e. Maximum grading in Supplementary Exam will be 'B+'.

f. No Sessional Exam will be conducted.

g. Examination will be taken on 60% marks like Term Final Examination.

h. If a student fails in a course more than once in regular terms, then for calculating 40% marks best one of all continuous assessment marks will be counted.

j. If a student fails in a laboratory/session course or becomes DC, that course cannot be taken in the supplementary examination. He/she must re-take that course in any next regular term. If a student is expelled from a course, he/she will have to take that course(as a regular) when offered by the department in the next regular term.

k. If any student fails in a course, he can clear the course retaking it 2nd time or, he can clear the examination appearing at the supplementary examination as well. Any one fails twice in a course, can only retake it in the regular term for appearing third time. But anyone fails even after appearing third time; he/she is required to take approval of MIST Academic Council for appearing 4th time or 5th (last) in a course while need to pay extra financial penalty for both time decided by a standing committee. If he/ she fails even 5th time in a course, will not be allowed to appear anymore in this same course.

l. Registration of Supplementary-I Exam to be done within 5th wk after completion of Fall Term (July to Dec) and registration of Supplementary-II exam to be done during the Mid-Term break of Spring Term (Jan to Jun), paying all the required fees.

m. There will be no provision for add/drop courses after registration.

n. Question Setting, Moderation, and Result Publication to be done following the same rules of Spring (Jan to Jun) / Fall (July to Dec) Term Final Exam as per existing Examination Policy.

p. Moderation of the questions for Supplementary-I will be done in the 5th week after completion of Fall Term (July to Dec) Final Exam and Supplementary-II with the moderation of the questions of Spring Term (Jan to Jun).

q. Separate Tabulation sheet to be made.

r. Thesis: if a student cannot complete thesis in two consecutive terms, with the recommendation of the supervisor, he/she may continue for next one/two term within six academic years.

Improvement Examination. Following rules to be followed:

61. a. Improvement examination is to be taken during the Supplementary-I and Supplementary-II examinations.

b. For Improvement examination, registration is to be done during the registration of Supplementary-I and Supplementary-II examinations by paying all the fees.

c. Question Setting, Moderation and Result Publication to be done with courses of Supplementary-I and Supplementary-II examinations.

d. Any student gets a grading below 'B+' and desires to improve that course; he will be allowed to appear the improvement examination for that particular course only once.

e. Highest grade of Improvement examination will be 'B+'.

f. One student is allowed to appear at Improvement exam in 6 (six) courses in his whole graduation period taking maximum two courses at a time (two courses at supplementary-I and one course at supplementary-II).

Irregular Graduation

62. If any graduating student clears his/her failed course in Spring Term/Fall Term/ Supplementary examinations and his graduation requirements are fulfilled, his graduation will be effective from the result publication date of Spring Term/Fall Term/Supplementary examinations and that student will be allowed to apply for provisional certificate.

Conclusion

63. MIST is committed in conferring degrees to the students in time which plays a very vital role in steering all academic activities of any university/institute. At the beginning MIST conducted all its examinations under the examination section of the University of Dhaka. IN June 2008, MIST got affiliation with BUP. Since then MIST has been conducting all its examinations under the control and authority of BUP. For the need of time, former MIST examination policy was reviewed several times. Present Review Committee has made necessary amendment/addition/deletion to suit the proposed course system. This policy may be reviewed every after 05 (five) years or as and when felt necessary by the authority of MIST.

DISTRIBUTION OF CREDIT HOURS

FACULTY OF CIVIL ENGINEERING

CE Department

Level	Term	Credit Hour
1	I	20.00
	II	20.00
2	I	20.00
	II	20.00
3	I	19.00
	II	20.50
4	I	20.50
	II	20.00
Total Credit Hours:		**160.00**

EWCE Department

Level	Term	Credit Hour
1	I	18.50
	II	18.50
2	I	20.50
	II	18.50
3	I	20.50
	II	22.00
4	I	21.00
	II	20.50
Total Credit Hours:		**160.00**

PME Department

Level	Term	Credit Hour
1	I	20.00
	II	20.50
2	I	20.00
	II	20.50
3	I	18.50
	II	21.00
4	I	19.00
	II	20.50
Total Credit Hours:		**160.00**

FACULTY OF ELECTRICAL AND COMPUTER ENGINEERING

CSE Department

Level	Term	Credit Hour
1	I	20.00
	II	20.00
2	I	20.25
	II	21.25
3	I	20.25
	II	19.00
4	I	20.00
	II	19.25
Total Credit Hours:		**160.00**

EECE Department

Level	Term	Credit Hour
1	I	18.50
	II	18.50
2	I	20.00
	II	19.00
3	I	21.50
	II	21.00
4	I	21.00
	II	20.50
Total Credit Hours:		**160.00**

FACULTY OF MECHANICAL ENGINEERING

ME Department

Level	Term	Credit Hour
1	I	20.50
	II	20.00
2	I	19.25
	II	22.25
3	I	20.00
	II	20.50
4	I	20.00
	II	17.50
Total Credit Hours:		**160.00**

AE Department

Level	Term	Credit Hour	
		Aerospace	Avionics
1	I	19.25	19.25
	II	21.25	21.25
2	I	18.75	22.50
	II	21.50	20.75
3	I	22.00	22.00
	II	20.25	19.25
4	I	18.50	18.50
	II	18.50	16.50
Total Credit Hours:		**160.00**	**160.00**

NAME Department

Level	Term	Credit Hour
1	I	20.00
	II	21.00
2	I	20.25
	II	20.25
3	I	20.50
	II	20.50
4	I	19.00
	II	18.50
Total Credit Hours:		**160.00**

IPE Department

Level	Term	Credit Hour
1	I	18.00
	II	19.25
2	I	23.00
	II	20.00
3	I	21.25
	II	21.00
4	I	21.00
	II	16.50
Total Credit Hours:		**160.00**

ACULTY OF BIOMEDICAL AND NUCLEAR ENGINEERING

BME Department

Level	Term	Credit Hour
1	I	19.00
	II	18.50
2	I	18.50
	II	19.50
3	I	21.00
	II	21.50
4	I	22.00
	II	20.00
Total Credit Hours:		**160.00**

NSE Department

Level	Term	Credit Hour
1	I	18.50
	II	21.50
2	I	20.25
	II	20.75
3	I	19.25
	II	20.50
4	I	20.50
	II	18.75
Total Credit Hours:		**160.00**

FACULTY OF ARCHITECTURE AND PLANNING

Arch Department

Level	Term	Credit Hour
1	I	20.5
	II	20.5
2	I	21.0
	II	21.0
3	I	19.5
	II	17.5
4	I	17.5
	II	15.0
5	I	15.5
	II	16.0
Total Credit Hours:		**184.00**

Urban and Regional Planning Department

Level	Term	Credit Hour
1	I	20.0
	II	20.5
2	I	20.5
	II	20.5
3	I	20.5
	II	18.5
4	I	21.0
	II	16.5
Total Credit Hours:		**158.00**

FACULTY OF SCIENCE AND HUMANITIES

Mathematics Department

Level	Term	Credit Hour
1	I	17.0
	II	17.5
2	I	17.5
	II	18.5
3	I	16.5
	II	17.5
4	I	18.5
	II	17.0
Total Credit Hours:		**140.00**

Chemistry Department

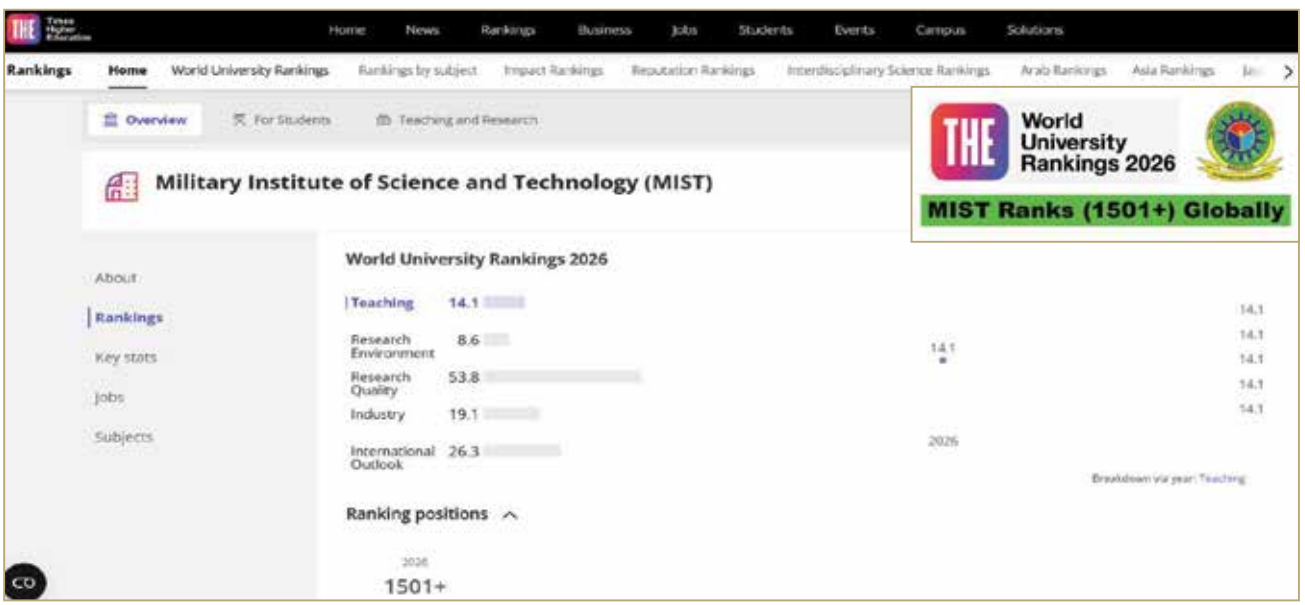
Level	Term	Credit Hour
1	I	16.0
	II	17.5
2	I	17.0
	II	18.0
3	I	17.0
	II	20.5
4	I	16.0
	II	18.0
Total Credit Hours:		**140.00**

Science and Humanities Department

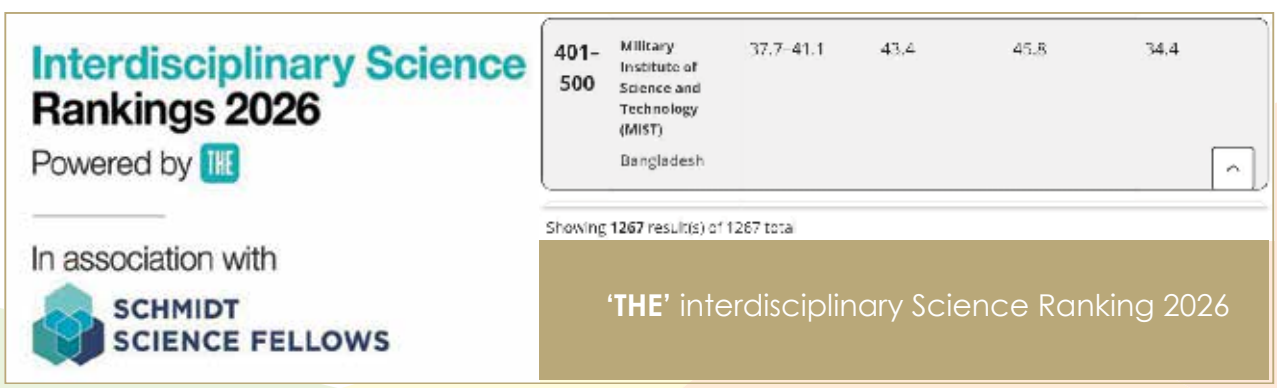
Level	Term	Credit Hour
1	I	33.50
	II	42.00
2	I	39.00
	II	07.00
3	I	14.00
	II	12.00
4	I	05.00
	II	09.00
5	I	02.00
Total Credit Hours:		**163.50**

ACHIEVEMENT OF 'THE' WORLD UNIVERSITY RANKING

Military Institute of Science and Technology (MIST) has secured a global rank for the first time in the UK-based higher education evaluation organization, Times Higher Education **(THE) 'World University Rankings 2026'**, MIST has been ranked in the 1501+ category, making milestone for an advanced engineering education institution run by Bangladesh Armed Forces. The achievement reflects MIST's progress in academic excellence, research innovation and institutional development. MIST successfully met **THE's** criteria across multiple indicators including research impact, international collaboration, industry engagement and teaching quality. At the same time, MIST has been ranked in the **'THE'** Interdisciplinary Science Ranking 2026 for the first time in history. The position of MIST is 401-500 out of 1267 universities from 94 countries. The milestone reflects MIST's growing global footprint in interdisciplinary research, innovation and academic excellence. It is a proud moment for entire MIST community.



'THE' World University Ranking 2026



'THE' interdisciplinary Science Ranking 2026

PHOTO GALLERY

Major General Md Nasim Parvez, BSP, ndc, afwc, psc
Commandant, MIST

Council of MIST

Governing Body of MIST

Academic Council of MIST

43rd Meeting of Committee for Advanced Studies and Research (CASR)

Alumni Meet of Electrical Electronic and Communication Engineering Department

Alumni Meet of Mechanical Engineering Department

Alumni Meet of Aeronautical Engineering Department

Online Launching of MIJST, Issue June 2025

1st Industrial Advisory Panel (IPA) Meeting of EECE Department

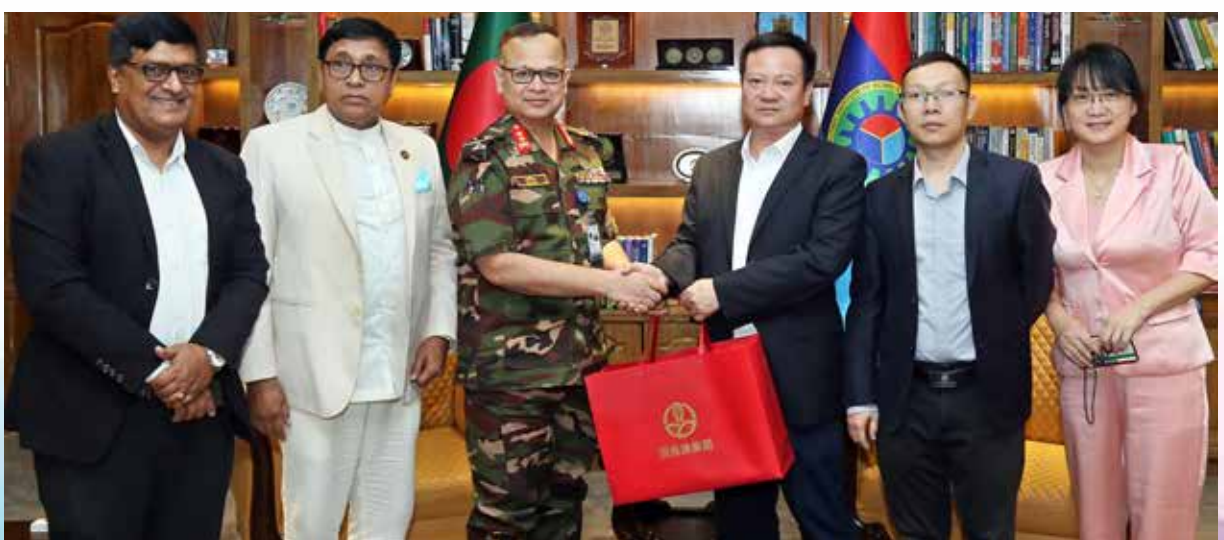
Faculty Development Programme-2025

Academic Affairs

MIST at BEAR Summit and National Semiconductor Symposium 2025

Exhibition of UAVs Developed by the AE Department for the Respected Chief of Army Staff at an Army Aviation Group Program

ITN-BUET Team Visit to MIST



Visit of China-BD Tech Co. Ltd to MIST

Visit of Dr. M. Saif Islam, Professor and Chair of the ECE Department at the University of California, Davis, USA to MIST

Delegation Visit from the University of East Anglia, UK to MIST

Orientation Training Visit BCS & BJS 84 Batch to MIST

Commandant and Faculties of MIST Visits to Walton High-Tech & Digi-Tech Industries PLC

Commandant's Visit to MIST Admission Test Examination Centre

Commandant's visit to Project Competition of MIST' Students

Inauguration of Shaheed Sheikh Ash-Abul Yamin Auditorium

Inauguration of Shaheed Rakibul Mukto Mancha

Inauguration of Shaheed Sheikh Ash-Abul Yamin & Shaheed Rakibul Corner

Tribute Ceremony in Memory of the Martyrs

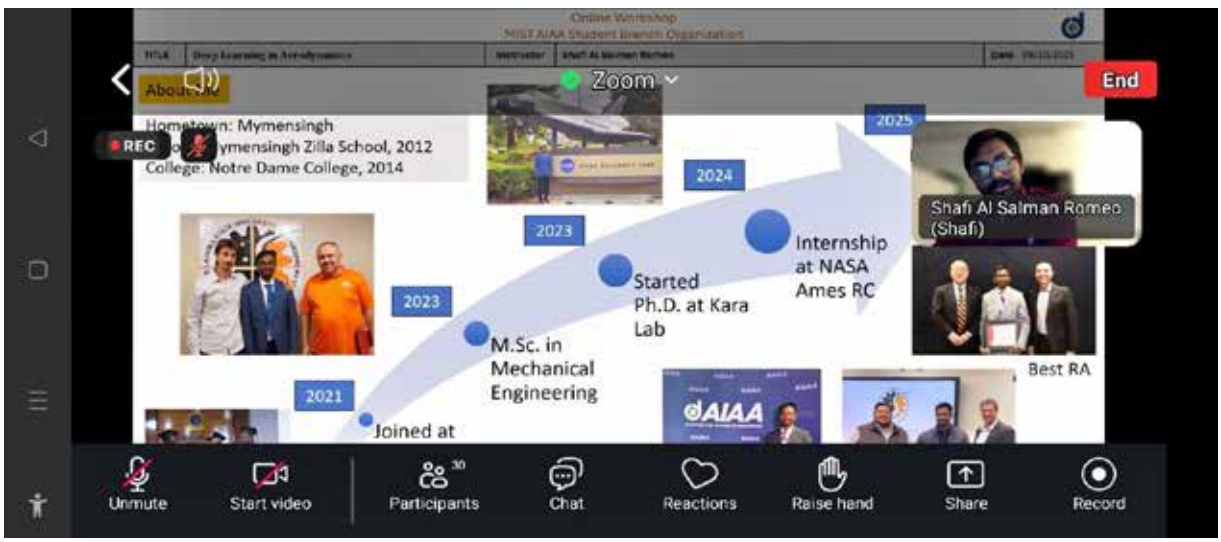
3rd International Conference on Mechanical and Applied Scieces-2025

Seminar on Resilience in the Information Domain: Tools to Address Misinformation and Disinformation on Social Media

Seminar on Causes and Prevention of Inland Marine Accidents

2025 4th IEEE International Conference on Robotics, Automation, Artificial-Intelligence & Internet-of-Things (RAAICON)

Seminar on Nanotechnology in Biomedicine



Workshop on Deep Learning in Aerodynamics

Webinar on Delve into AI and Robotics: Insights from MIT and Cal Poly Experts

MoU Signing Between MIST and Neural Semiconductor Limited

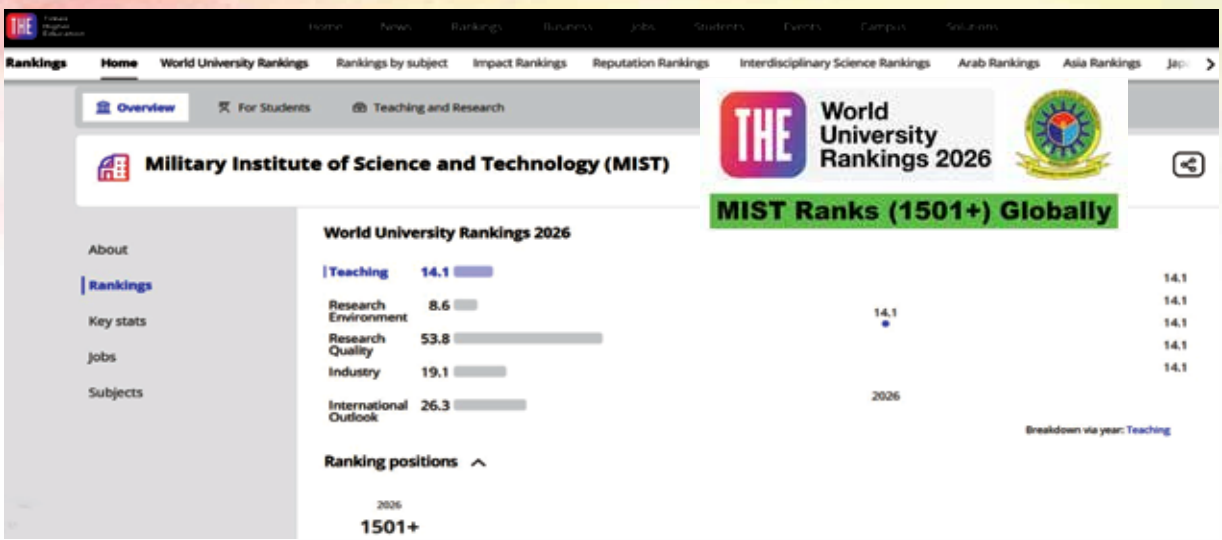
MoU Signing between MIST and Fortis Group

Agreement Signing Ceremony between MIST and Agni Sustems PLC

Geological Field Study of PME Department

Industrial Training Visit to Dhaka CMH of BME Department

Study Visit to Professor Hamiduzzaman Khan Sculpture Park of Arch Department



MIST has Secured 1501+ Position in Times Higher Education (THE) 'World University Rankings 2026

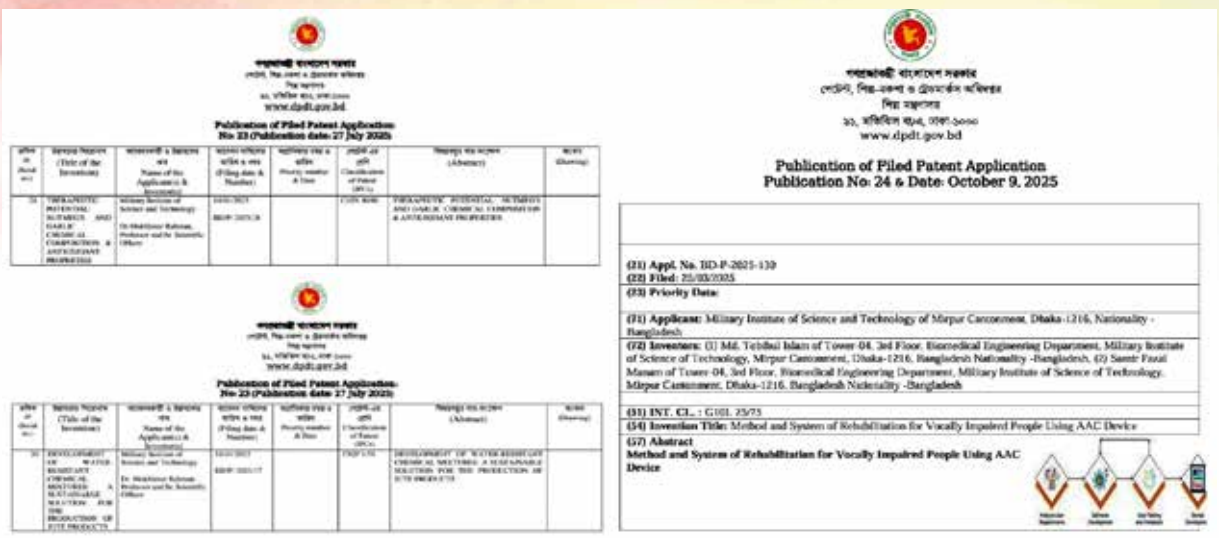
Inclusion in the World's Top 2% scientists

Associate Professor Mohammad Sazzad Hossain, Received an International Fellowship at the Getty Conservation Institute, USA

'MIST Mongol Barota' secured 14th place at University Rover Challenge (URC) 2025

MIST BLITZ Secured 4th Place at Formula Student Combustion China 2025

Received the 2nd Prize in an Open Charrette



গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
শিল্প মন্ত্রণালয়
www.dpdt.gov.bd

Publication of Filed Patent Application
No: 23 (Publication date: 27 July 2025)

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
শিল্প মন্ত্রণালয়
www.dpdt.gov.bd

Publication of Filed Patent Application
No: 23 (Publication date: 27 July 2025)

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পেটেন্ট, শিল্প-নকশা ও ট্রেডমার্ক অধিদপ্তর
শিল্প মন্ত্রণালয়
www.dpdt.gov.bd

Publication of Filed Patent Application
Publication No: 24 & Date: October 9, 2025

(21) Appl. No. BD-P-2025-139
(22) Filed: 25/03/2025
(23) Priority Data:
(71) Applicant: Military Institute of Science and Technology of Mirpur Cantonment, Dhaka-1216, Nationality - Bangladesh
(72) Inventors: (1) Md. Tehbal Islam of Tower-04, 3rd Floor, Biomedical Engineering Department, Military Institute of Science of Technology, Mirpur Cantonment, Dhaka-1216, Bangladesh Nationality -Bangladesh, (2) Samir Fayal Manam of Tower-04, 3rd Floor, Biomedical Engineering Department, Military Institute of Science of Technology, Mirpur Cantonment, Dhaka-1216, Bangladesh Nationality -Bangladesh
(51) INT. CL. : G10L 25/75
(54) Invention Title: Method and System of Rehabilitation for Vocally Impaired People Using AAC Device
(57) Abstract
Method and System of Rehabilitation for Vocally Impaired People Using AAC Device

Patents Obtained by MIST

Team MIST Eagle Forces Secured Champion at the BUP CSE Tech Carnival 2025

Won The 'Biocity: Youth For Urban Wetland Revival' Competition

MIST Achieves Outstanding Success at Innoverse Bangladesh 2025

MIST Secures Top Positions in the 16th National Math Olympiad (Dhaka North Zone)

MIST's Team MEGHDOOT Achieved South Asia's Top Flight Mission Score at AIAA Design/Build/Fly 2025, Arizona, USA

MIST Students Secured 3rd Position in Global Atomic Quiz 2025


International Astronomy and Astrophysics Competition
Edition of 2025

BRONZE HONOUR

presented to

Shehab Shahriar Fardin

Date of Issue: 22 September 2025
Country: Bangladesh
School: military institute of science and technology
Verify-ID: F-2025-FE84F265E7D

for participating in the Final Round of the International Astronomy and Astrophysics Competition of 2025. The Final Round was a supervised exam of twenty questions which required comprehensive astronomy and astrophysics knowledge. The participant scored 11 points and was placed among the top 29% of all participants.

MIST Student Wins Bronze Honour in IAAC 2025

Nobin Boron-2025

Sharat Sombashan-2025

Farewell Festival - 2025

Campus Hour & Cultural Competition

Melody Hour- Literature & Cultural Club MIST

Inter Department Cultural Competition 2025

Cyber Raid 2025

Project Completion and Poster presentation 2025

Inventious 4.1 2025: National Tech Festival

Inter Department Football Competition 2025

Inter Department Volleyball Competition 2025

Students' Accommodation

Osmany Hall

Male Wing

Female Wing

SYLLABI OF ALL DEPARTMENTS

FACULTY OF CIVIL ENGINEERING

DEPT OF CIVIL ENGINEERING

Total Credit Hours: 160.00

Level-1, Term-I

Course Code	Course Name	Type of Course	Contact Hour	Credits
CE 101	Analytical Mechanics	Theory	3.00	3.00
PHY 101	Waves and Oscillation, Optics and Modern Physics	Theory	3.00	3.00
CHEM 101	Fundamentals of Chemistry	Theory	3.00	3.00
MATH 101	Differential and Integral Calculus	Theory	3.00	3.00
GEBS 101/ GES 101	Bangladesh Studies/ Fundamentals of Sociology	Theory	2.00	2.00
Subtotal (Theory)			**14.00**	**14.00**
CSE 176	Computer Programming Sessional	Sessional	3.00	1.50
ME 132	Workshop Technology Sessional	Sessional	3.00	1.50
CHEM 102	Chemistry Sessional	Sessional	3.00	1.50
CE 100	Civil Engineering Drawing	Sessional	3.00	1.50
Subtotal (Sessional)			**12.00**	**6.00**
Total =			**26.00**	**20.00**

Level-1, Term-II

Course Code	Course Name	Type of Course	Contact Hour	Credits
PHY 107/ CHEM 105	Structure of Matter, Heat and Temperature, Kinetics and Kinematics/ Environmental Chemistry	Theory	3.00	3.00
MATH 103	Differential Equations and Matrix	Theory	3.00	3.00
GELM 175	Leadership and Management	Theory	2.00	2.00
EECE 165	Basic Electrical Technology	Theory	3.00	3.00
CE 103	Surveying and Spatial Information Engineering	Theory	3.00	3.00
Subtotal (Theory)			**14.00**	**14.00**
PHY 102	Physics Sessional	Sessional	3.00	1.50
LANG 102	Communicative English I	Sessional	3.00	1.50
CE 102	Computer Aided Drawing	Sessional	3.00	1.50
CE 104	Practical Surveying	Field work	3wks	1.50
Subtotal (Sessional & Field Work)			**9.00**	**6.00**
Total =			**23.00**	**20.00**

Level-2, Term-I

Course Code	Course Name	Type of Course	Contact hours	Credits
MATH 201	Vector Analysis, Laplace Transform and Coordinate Geometry	Theory	3.00	3.00
GEA 201/ GEE 201	Principles of Accounting/ Fundamentals of Economics	Theory	2.00	2.00
CE 203	Engineering Geology and Geomorphology	Theory	3.00	3.00
CE 211	Mechanics of Solids I	Theory	3.00	3.00
CE 261	Fluid Mechanics	Theory	3.00	3.00
Subtotal (Theory)			**14.00**	**14.00**
CE 200	Details of Construction	Sessional	3.00	1.50
CE 210	GIS and Remote Sensing	Sessional	3.00	1.50
CE 262	Fluid Mechanics Sessional	Sessional	3.00	1.50
LANG 202	Communicative English II	Sessional	3.00	1.50
Subtotal (Sessional)			**12.00**	**6.00**
Total =			**26.00**	**20.00**

Level-2, Term-II

Course Code	Course Name	Type of Course	Contact hours	Credits
MATH 203	Applied Mathematics for Engineers	Theory	3.00	3.00
GEEP 203	Engineering Ethics and Professional Practices	Theory	2.00	2.00
CE 201	Engineering Materials	Theory	3.00	3.00
CE 205	Numerical Methods for Engineering	Theory	3.00	3.00
CE 213	Mechanics of Solids II	Theory	3.00	3.00
Subtotal (Theory)			**14.00**	**14.00**
CSE 274	Engineering Computations Sessional	Sessional	3.00	1.50
ARCH 214	Architectural, Engineering and Planning Appreciation	Sessional	3.00	1.50
CE 208	Quantity Surveying	Sessional	3.00	1.50
CE 212	Structural Mechanics and Materials Sessional	Sessional	3.00	1.50
Subtotal (Sessional)			**12.00**	**6.00**
Total =			**26.00**	**20.00**

Level-3, Term-I

Course Code	Course Name	Type of Course	Contact hours	Credits
CE 311	Structural Analysis and Design I	Theory	4.00	4.00
CE 315	Design of Concrete Structures I	Theory	3.00	3.00
CE 331	Environmental Engineering I	Theory	3.00	3.00
CE 341	Principles of Soil Mechanics	Theory	4.00	4.00
GESP 303	Sustainability of Development Projects	Theory	2.00	2.00
Subtotal (Theory)			**16.00**	**16.00**
GERM 352	Fundamentals of Research Methodology	Sessional	2.00	1.00
CE 332	Environmental Engineering Sessional	Sessional	3.00	1.50
CE 342	Geotechnical Engineering Sessional	Sessional	3.00	1.50
Subtotal (Sessional)			**8.00**	**4.00**
Total =			**24.00**	**20.00**

Level-3, Term-II

Course Code	Course Name	Type of Course	Contact hours	Credits
CE 317	Design of Concrete Structures II	Theory	3.00	3.00
CE 333	Environmental Engineering II	Theory	4.00	4.00
CE 343	Foundation Engineering	Theory	3.00	3.00
CE 351	Fundamentals of Transportation Engineering	Theory	3.00	3.00
CE 361	Open Channel Hydraulics	Theory	3.00	3.00
Subtotal (Theory)			**16.00**	**16.00**
CE 300	Civil Engineering Students' Internship Programme (CESIP)	Internship	3 wks	1.50
CE 316	Concrete Structures Design Sessional I	Sessional	3.00	1.50
CE 362	Open Channel Hydraulics Sessional	Sessional	3.00	1.50
Subtotal (Sessional)			**6.00**	**4.50**
Total =			**22.00**	**20.50**

Level-4, Term-I

Course Code	Course Name	Type of Course	Contact hours	Credits
CE 411	Structural Analysis and Design II	Theory	3.00	3.00
CE 413	Design of Steel Structures	Theory	3.00	3.00
CE 451	Highway Materials, Pavement Design and Railways	Theory	4.00	4.00
CE 463	Hydrology and Irrigation Engineering	Theory	4.00	4.00
Subtotal (Theory)			**14.00**	**14.00**
CE 410	Concrete Structures Design Sessional II	Sessional	3.00	1.50
CE 414	Steel Structures Design Sessional	Sessional	3.00	1.50
CE 452	Highway Materials, Mix Design and Traffic Engineering Sessional	Sessional	3.00	1.50
CE 400	Final Year Research Project (FYP)	Thesis	2.00	1.00
CE 450	Capstone Project	-	2.00	1.00
Subtotal (Thesis, Sessional & Project)			**13.00**	**6.50**
Total =			**27.00**	**20.50**

Level-4, Term-II

Course Code	Course Name	Type of Course	Contact hours	Credits
GEPM 401	Project Planning and Construction Management	Theory	3.00	3.00
CE 4XX	Two Theory Courses in Major Division from Elective Courses	Theory	4.00	4.00
CE 4XX	Two Theory Courses in Minor Division from Elective Courses	Theory	4.00	4.00
Subtotal (Theory)			**11.00**	**11.00**
CE 400	Final Year Research Project (FYP)from Elective Courses	Thesis	6.00	3.00
CE 450	Capstone Project	-	4.00	2.00
CE 4XX	One Lab Course in Major Division from Elective Courses	Sessional	3.00	1.50
CE 4XX	One Lab Course in Major Division from Elective Courses	Sessional	3.00	1.50
Subtotal (Thesis, Sessional)			**16.00**	**8.00**
Total =			**27.00**	**19.00**

List of Elective Courses for Structural Discipline (Any Two Theory & One Sessional) (Level-4, Term-II)

Sl	Course Code	Course Name	Type of Course	Contact hours	Credits
1.	CE 415	Pre-stressed Concrete	Theory	2.00	2.00
2.	CE 417	Design of Concrete Structures III	Theory	2.00	2.00
3.	CE 419	Introduction to Finite Element Method	Theory	2.00	2.00
4.	CE 421	Dynamics of Structures	Theory	2.00	2.00
5.	CE 423	Structural Safety	Theory	2.00	2.00
6.	CE 425	Seismic Design of Structures	Theory	2.00	2.00
7.	CE 427	Advanced Solid Mechanic	Theory	2.00	2.00
8.	CE 429	Design of Steel-Concrete Composite Structure	Theory	2.00	2.00
9.	CE 412	Bridge Design Sessional	Sessional	3.00	1.50

List of Elective Courses for Environment Discipline (Any Two Theory & One Sessional) (Level-4, Term-II)

Sl	Course Code	Course Name	Type of Course	Contact hours	Credits
1.	CE 431	Natural Resources and Renewable Energy	Theory	2.00	2.00
2.	CE 433	Solid and Hazardous Waste Management	Theory	2.00	2.00
3.	CE 435	Environmental Pollution and Management	Theory	2.00	2.00
4.	CE 437	Climate Change and Disaster Management	Theory	2.00	2.00
5.	CE 439	Environmental Impact Assessment and Sustainability	Theory	2.00	2.00
6.	CE 432	Design of Water Supply, Sanitation and Sewerage Systems	Sessional	3.00	1.50

List of Elective Courses for Geotechnical Discipline (Any Two Theory & One Sessional) (Level-4, Term-II)

Sl	Course Code	Course Name	Type of Course	Contact hours	Credits
1.	CE 443	Earth Retaining Structures	Theory	2.00	2.00
2.	CE 445	Elementary Soil Dynamics	Theory	2.00	2.00
3.	CE 447	Soil-Water Interaction	Theory	2.00	2.00
4.	CE 449	Numerical Methods in Geotechnics	Theory	2.00	2.00
5.	CE 442	Foundation Design Sessional	Sessional	3.00	1.50

List of Elective Courses for Transportation Discipline (Any Two Theory & One Sessional) (Level-4, Term-II)

Sl	Course Code	Course Name	Type of Course	Contact hours	Credits
1.	CE 453	Traffic Engineering Design and Management	Theory	2.00	2.00
2.	CE 455	Pavement Management, Drainage and Airport Engineering	Theory	2.00	2.00
3.	CE 457	Urban Transportation Planning & Management	Theory	2.00	2.00
4.	CE 459	Intelligent Transportation System	Theory	2.00	2.00
5.	CE 461	Railway Engineering	Theory	2.00	2.00
6.	CE 454	Traffic Studies and Pavement Design Sessional	Sessional	3.00	1.50

List of Elective Courses for Water Discipline (Any Two Theory & One Sessional) (Level-4, Term-II)

Sl	Course Code	Course Name	Type of Course	Contact hours	Credits
1.	CE 465	Groundwater Engineering	Theory	2.00	2.00
2.	CE 467	Flood Mitigation and Management	Theory	2.00	2.00
3.	CE 469	River Engineering	Theory	2.00	2.00
4.	CE 471	Hydraulic Structures	Theory	2.00	2.00
5.	CE 473	Coastal Engineering	Theory	2.00	2.00
6.	CE 472	Hydraulic Structures Design Sessional	Sessional	3.00	1.50

DEPT OF ENVIRONMENTAL, WATER RESOURCES AND COASTAL ENGINEERING

Total Credit Hours: 160.00

Level – 1, Term – I

Course No	Course Name	Type of Course	Credit Hour	Contact Hour
CHEM 103	Fundamentals of Chemistry	Theory	3.00	3.00
MATH 101	Differential and Integral Calculus		3.00	3.00
EECE 167	Basic Electrical Technology		3.00	3.00
EWCE 101	Analytical Mechanics		3.00	3.00
EWCE 131	Environment, Ecology and Water Resources		2.00	2.00
Subtotal (Theory)			**14.00**	**14.00**
CHEM 104	Chemistry Sessional	Sessional	1.50	3.00
ME 142	Workshop Sessional		1.50	3.00
EWCE 100	Engineering Drawing and Computer Aided Design Sessional		1.50	3.00
Subtotal (Sessional)			**4.50**	**9.00**
Total = Credits: 18.50, Contact hours: 23.00				

Level – 1, Term – II

Course No	Course Name	Type of Course	Credit Hour	Contact Hour
PHY 129	Waves and Oscillations, Optics and Structure of Matter	Theory	3.00	3.00
MATH 103	Differential Equations and Matrix		3.00	3.00
GEBS 101	Bangladesh Studies		2.00	2.00
EWCE 103	Surveying		3.00	3.00
EWCE 105	Environmental Chemistry		3.00	3.00
Subtotal (Theory)			**14.00**	**14.00**
PHY 130	Physics Sessional	Sessional	1.50	3.00
LANG 102	Communicative English-1		1.50	3.00
EWCE 104	Practical Surveying	Field Work	1.50	3.00
Subtotal (Sessional & Field Work)			**4.50**	**9.00**
Total = Credits: 18.50, Contact hours: 23.00				

Level – 2, Term – I

Course No	Course Name	Type of Course	Credit Hour	Contact Hour
GELM 275	Leadership and Management	Theory	2.00	2.00
MATH 201	Vector Analysis, Laplace Transform & Co-ordinate Geometry		3.00	3.00
EWCE 201	Construction Materials		3.00	3.00
GES 201	Fundamentals of Sociology		2.00	2.00
EWCE 205	Numerical Methods		2.00	2.00
EWCE 211	Mechanics of Solids		4.00	4.00
Subtotal (Theory)			**16.00**	**16.00**
CSE 278	Computer Programming and Computations Sessional	Sessional	1.50	3.00
LANG 202	Communicative English-II		1.50	3.00
EWCE 212	Structural Mechanics and Materials Sessional		1.50	3.00
Subtotal (Sessional)			**4.50**	**9.00**
Total = Credits: 20.50, Contact hours: 25.00				

Level – 2, Term – II

Course No	Course Name	Type of Course	Credit Hour	Contact Hour
GEA 201/ GEE 201	Principles of Accounting/ Fundamentals of Economics	Theory	2.00	2.00
MATH 203	Applied Math for Engineering		3.00	3.00
EWCE 203	Geology and Geomorphology		3.00	3.00
EWCE 261	Fluid Mechanics		3.00	3.00
EWCE 213	Structural Analysis I		3.00	3.00
Subtotal (Theory)			**14.00**	**14.00**
EWCE 200	Details of Construction & Quantity Surveying	Sessional	1.50	3.00
EWCE 206	GIS in Environmental and Water Resources Engineering		1.50	3.00
EWCE 262	Fluid Mechanics Sessional		1.50	3.00
Subtotal (Sessional)			**4.50**	**9.00**
Total = Credits: 18.50, Contact hours: 23 .00				

Level- 3, Term - I

Course No	Course Name	Type of Course	Credit Hour	Contact Hour
EWCE 363	Engineering Hydrology	Theory	3.00	3.00
CE 385	Design of Concrete Structures I		3.00	3.00
EWCE 331	Water Supply Engineering		3.00	3.00
EWCE 341	Geotechnical Engineering- I: Principle and Practices of Soil Mechanics		3.00	3.00
EWCE 351	Transportation Engineering		4.00	4.00
Subtotal (Theory)			**16.00**	**16.00**
EWCE 332	Environment Engineering Sessional	Sessional	1.50	3.00
EWCE 342	Geotechnical Engineering Sessional		1.50	3.00
EWCE 352	Transportation Engineering Sessional		1.50	3.00
Subtotal (Sessional)			**4.50**	**9.00**
Total = Credits: 20.50, Contact hours: 25.00				

Level - 3, Term - II

Course No	Course Name	Type of Course	Credit Hour	Contact Hour
GEPM 375	Project Planning and Construction Management	Theory	3.00	3.00
CE 387	Design of Concrete Structure II		4.00	4.00
EWCE 333	Waste Water Engineering and Sanitation		4.00	4.00
EWCE 343	Geotechnical Engineering- II: Foundation Engineering		3.00	3.00
EWCE 361	Open Channel Hydraulics		3.00	3.00
Subtotal (Theory)			**17.00**	**17.00**
EWCE 300	Students' Internship Program (SIP)	Internship	1.00	2.00+
CE 386	Concrete Structure Design Sessional I	Sessional	1.50	3.00
EWCE 362	Open Channel Hydraulics Sessional		1.50	3.00
GERM 352	Fundamentals of Research Methodology		1.00	2.00
Subtotal (Internship & Sessional)			**5.00**	**10.00**
Total = Credits: 22.00, Contact hours: 27.00				

Level - 4, Term - I

Course No	Course Name	Type of Course	Credit Hour	Contact Hour
GEEM 445	Engineering Ethics and Professional Practices	Theory	2.00	2.00
EWCE 411	Structural Analysis II		3.00	3.00
EWCE 431	Environment and Social Impact Assessment		3.00	3.00
EWCE 461	River Engineering and Flood Management		3.00	3.00
EWCE 471	Coastal Engineering		3.00	3.00
Subtotal (Theory)			**14.00**	**14.00**
EWCE 432	Environmental Engineering Design Sessional	Sessional	1.50	3.00
EWCE 462	Computer Applications in Water and Environmental Engineering		1.50	3.00
EWCE 464	Advanced Applications of GIS and RS		1.50	3.00
EWCE 400	Project and Thesis	Research	1.00	2.00
EWCE 402	Capstone Project	Design Project	1.50	3.00
Subtotal (Sessional & Project)			**7.00**	**14.00**
Total = Credits: 21.00, Contact hours: 28.00				

Level - 4, Term - II (Major: Environmental Engg)

Course No	Course Name	Type of Course	Credit Hour	Contact Hour
EWCE 467	Integrated Water Resource Management (IWRM)	Compulsory Theory	3.00	3.00
EWCE 433	Solid and Hazardous Waste Management	Major Theory	3.00	3.00
EWCE 435	Air Pollution and Control		2.00	2.00
EWCE 437	Industrial Waste and Waste Water Treatment		3.00	3.00
EWCE 469/ 473/ 475/ 477/ 479	Mathematical Modelling in Water Resources Engineering/ Waterway Engineering/ Urban Hydrology/ Climatology/ Groundwater Engineering	Minor Theory	2.00	2.00
Subtotal (Theory)			**13.00**	**13.00**
EWCE 400	Project and Thesis	Research	3.00	6.00
EWCE 402	Capstone Project	Design Project	1.50	3.00
EWCE 434	Environmental Modelling Sessional	Sessional	1.50	3.00
EWCE 436/ 438	Treatment plant design sessional/ Building Service Sessional		1.50	3.00
Subtotal (Sessional & Project)			**7.50**	**15.00**
Total = Credits: 20.50, Contact hours: 28.00				

Level -4, Term-II ((Major: Water Resources Engg)

Course No	Course Name	Type of Course	Credit Hour	Contact Hour
EWCE 467	Integrated Water Resource Management (IWRM)	Compulsory Theory	3.00	3.00
EWCE 463	Irrigation and Drainage Engineering	Major Theory	3.00	3.00
EWCE 465	Design of Hydraulic Structures		3.00	3.00
EWCE 477/ 479	Climatology / Groundwater Engineering		2.00	2.00
EWCE 435/ 439/481/ 483/485	Air Pollution and Control / Natural Resources & Renewable Energy/ Climate Change & Disaster Management/ Building Services/ Environmental Management System	Minor Theory	2.00	2.00
Subtotal (Theory)			**13.00**	**13.00**
EWCE 400	Project and Thesis	Research	3.00	6.00
EWCE 402	Capstone Project	Design Project	1.50	3.00
EWCE 466	Hydraulic Structure Design Sessional	Sessional	1.50	3.00
EWCE 468	Water Modelling Sessional		1.50	3.00
Subtotal (Sessional & Project)			**7.50**	**15.00**
Total = Credits: 20.50, Contact hours: 28.00				

DEPT OF PETROLEUM AND MINING ENGINEERING

Total Credit Hours: 160.00

LEVEL – 1, TERM – I

Course Code	Course Name	Contact hour/ week	Credits
THEORY			
PHY 141	Waves and Oscillations, Optics, and Structure of Matter	3	3
MATH 101	Differential and Integral Calculus	3	3
PME 111	Geology for Petroleum and Mining Engineers	3	3
PME 113	Introduction to Petroleum and Mining Engineering	3	3
GES 101	Fundamentals of Sociology	2	2
SESSIONAL / LABORATORY			
PHY 142	Physics Sessional	3	1.5
ME 176	Workshop Practice	3	1.5
ME 180	Engineering Drawing and CAD	3	1.5
PME 112	Geology Laboratory	3	1.5
Total:		**26.00**	**20.00**

Contact Hours= 14.0 (Theo) + 12.0 (Lab) = 26.0 hours/week
Total Credits = 20.0
No of Theory Courses = 5
No of Laboratory Courses = 4

LEVEL – 1, TERM – II

Course Code	Course Name	Contact hour/ week	Credits
THEORY			
PME 121	Petroleum Engineering Thermodynamics	2	2
CE 181	Engineering Mechanics	3	3
GEBS 101	Bangladesh Studies	2	2
MATH 103	Differential Equations and Matrix	3	3
CHEM 101	Fundamentals of Chemistry	3	3
PME 123	Reservoir Rock and Fluid Properties	3	3
SESSIONAL/LABORATORY			
CHEM 102	Chemistry Sessional	3.00	1.50
PME 124	Reservoir Rock and Fluid Properties Laboratory	3.00	1.50
LANG 102	Communicative English -I	3.00	1.50
Total:		**25.00**	**20.50**

Contact Hours= 16 (Theo) + 9.0 (Lab) = 25 hours/ week
Total Credits = 20.5
No of Theory Courses = 6
No of Laboratory Courses = 3

LEVEL – 2, TERM – I

Course Code	Course Name	Contact hour/ week	Credits
THEORY			
EECE 261	Fundamentals of Electrical and Electronic Engineering	3.00	3.00
MATH 201	Vector Analysis, Laplace Transformation & Co-ordinate Geometry	3.00	3.00
GELM 275	Leadership and Management	2.00	2.00
CE 283	Strength of Materials	3.00	3.00
PME 211	Rock Mechanics for Petroleum and Mining Engineers	3.00	3.00
SESSIONAL / LABORATORY			
LANG 202	Communicative English- II	3.00	1.50
EECE 262	Electrical and Electronic Engineering Laboratory	3.00	1.50
PME 212	Rock Mechanics Laboratory	3.00	1.50
PME 222	Drilling Fluid Laboratory	3.00	1.50
Total:		**2600**	**20.00**

Contact Hours: 14.00 (Theo) + 12.00 (Lab) = 26.00 hours/week
Total Credits = 20.00
No of Theory Courses = 6
No of Laboratory Courses = 4

LEVEL – 2, TERM – II

Course Code	Course Name	Contact hour/ week	Credits
THEORY			
CSE 271	Introduction to Computer Programming	2.00	2.00
PME 213	Exploration Geophysics	2.00	2.00
ME 271	Fluid Mechanics	3.00	3.00
PME 231	Mining System	3.00	3.00
PME 233	Shaft sinking and Tunneling	3.00	3.00
GEEA 201	Fundamentals of Economics and Accounting	3.00	3.00
SESSIONAL / LABORATORY			
CSE 272	Computer Programming Sessional	1.50	0.75
PME 214	Exploration Geophysics Laboratory	3.00	1.50
PME 232	Mining System Laboratory	3.00	1.50
ME 272	Fluid Mechanics Laboratory	1.50	0.75
Total:		**25.00**	**20.50**

Contact Hours: 16.00 (Theo) + 9.00 (Lab) = 25.00 hours/week

Total Credits = 20.50
No of Theory Courses = 6
No of Laboratory Courses = 4

LEVEL – 3, TERM – I

Course Code	Course Name	Contact hour/ week	Credits
THEORY			
PME 331	Mine Instrumentation and Machineries	3.00	3.00
PME 333	Ground Water Managements in Mining	2.00	2.00
PME 321	Well Logging and Formation Evaluation	3.00	3.00
PME 323	Drilling Engineering	3.00	3.00
PME 311	Heat and Mass Transfer	2.00	2.00
SESSIONAL / LABORATORY			
PME 332	Mine Instrumentation and Machineries Laboratory	3.00	1.50
PME 322	Well Logging and Formation Evaluation Laboratory	3.00	1.50
PME 324	Rig Floor Simulation Laboratory	3.00	1.50
GERM 352	Fundamentals of Research Methodology	2.00	1.00
Total:		**24.00**	**18.50**

Contact Hours: 13.00 (Theo) + 11.00 (Lab) = 24.00 hours/week Total Credits = 18.50
No of Theory Courses = 5
No of Laboratory Courses = 4

LEVEL – 3 (TERM – II)

Course Code	Course Name	Contact hour/ week	Credits
THEORY			
PME 325	Petroleum Production Engineering	3.00	3.00
PME 327	Natural Gas Processing and LNG Technology	3.00	3.00
PME 329	Reservoir Engineering	3.00	3.00
PME 335	Mine Survey	3.00	3.00
GESL 317	Environment, Sustainability and Law	2.00	2.00
PME 337	Rock Blasting and Explosive Technology	3.00	3.00
SESSIONAL / LABORATORY			
PME 328	Natural Gas Processing and LPG Laboratory	3.00	1.50
PME 336	Mine Survey Laboratory	3.00	1.50
PME 310	Industrial Training	4 weeks	1.00
Total:		**23+4 weeks**	**21.00**

Contact Hours: 17.00+ (Theo) + 6.00 (Lab) = 23.00 hours/week + 4 weeks
Total Credits = 21.00
No of Theory Courses = 6
No of Laboratory Courses = 3

LEVEL – 4, TERM – I

Course Code	Course Name	Contact hour/ week	Credits
THEORY			
PME 421	Well Test Analysis	3.00	3.00
PME 423	Reservoir Modeling and Simulation	3.00	3.00
PME 431	Mine Ventilation and Environmental Engineering	3.00	3.00
PME 425	Petroleum Refining and LPG Technology	3.00	3.00
GEEM 447	Engineering Ethics and Moral Philosophy	2.00	2.00
SESSIONAL / LABORATORY			
PME 410	Thesis/ Project	2.00	1.00
PME 412	Capstone Project	2.00	1.00
PME 424	Reservoir Modeling and Simulation Sessional	3.00	1.50
PME 432	Mine Ventilation and Environmental Engineering Laboratory	3.00	1.50
Total:		**24.00**	**19.00**

Contact Hours: 14.00 (Theo) + 10.00 (Lab) = 24.00 hours/week
Total Credits = 19.00
No of Theory Courses = 5
No of Laboratory Courses = 4

LEVEL – 4 (TERM – II)

Course Code	Course Name	Contact hour/ week	Credits
THEORY			
GEPM 477	Project Management and Finance	3.00	3.00
PME 427	Transmission and Distribution of Natural Gas	3.00	3.00
PME 429	Enhanced Oil Recovery Techniques	2.00	2.00
PME 433	Mineral Processing	3.00	3.00
PME 435	Mine Planning and Design	3.00	3.00
SESSIONAL / LABORATORY			
PME 410	Thesis/ Project	6.00	3.00
PME 412	Capstone Project	4.00	2.00
PME 434	Minerals Processing Laboratory	3.00	1.50
Total:		**27.00**	**20.50**

Contact Hours: 14.00 (Theo) + 13.00 (Lab) = 27.00 hours/week
Total Credits = 20.50
No of Theory Courses = 5
No of Laboratory Courses = 3

FACULTY OF ELECTRICAL AND COMPUTER ENGINEERING

DEPT OF COMPUTER SCIENCE AND ENGINEERING

Total Credit Hours: 160.00

Level-1, Term-I

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CSE -101	Discrete Mathematics	3.00	-	3.00
CHEM-101	Fundamentals of Chemistry	3.00	-	3.00
CHEM-102	Chemistry Sessional	-	1.50	0.75
EECE-163	Electrical Circuit Analysis	3.00	-	3.00
EECE-164	Electrical Circuit Analysis Sessional	-	1.50	0.75
GEBS-101	Bangladesh Studies	2.00	-	2.00
MATH-101	Differential and Integral Calculus	3.00	-	3.00
PHY-101	Waves and Oscillations, Optics and Modern Physics	3.00	-	3.00
PHY-102	Physics Sessional	-	3.00	1.50
Total:		**17.00**	**6.00**	**20.00**
Total = Contact hours: 23.00; Credits : 20.00				

Level-1, Term-II

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CE-150	Engineering Drawing and CAD Sessional	-	1.50	0.75
CSE-103	Digital Logic Design	3.00	-	3.00
CSE-104	Digital Logic Design Sessional	-	3.00	1.50
CSE-105	Structured Programming Language	3.00	-	3.00
CSE-106	Structured Programming Language Sessional	-	3.00	1.50
EECE-169	Electronic Devices and Circuits	3.00	-	3.00
EECE-170	Electronic Devices and Circuits Sessional	-	1.50	0.75
LANG-102	Communicative English-I	-	3.00	1.50
MATH-105	Vector Analysis, Matrix and Coordinate Geometry	3.00	-	3.00
ME-122	Fundamental of Mechanical Engineering Sessional	-	4.00	2.00
Total:		**12.00**	**16.00**	**20.00**
Total = Contact hours: 28.00; Credits : 20.00				

Level-2, Term-I

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CSE-203	Data Structures and Algorithms-I	3.00	-	3.00
CSE-204	Data Structures and Algorithms-I Sessional	-	3.00	1.50
CSE-205	Object Oriented Programming Language	3.00	-	3.00
CSE-206	Object Oriented Programming Language Sessional-I	-	3.00	1.50
CSE-217	Theory of Computation	3.00	-	3.00
EECE-269	Electrical Drives and Instrumentation	3.00	-	3.00
EECE-270	Electrical Drives and Instrumentation Sessional	-	1.50	0.75
ENG-202	Communicative English-II	-	3.00	1.50
MATH-205	Differential Equations, Laplace Transform and Fourier Transform	3.00	-	3.00
Total:		**15.00**	**10.50**	**20.25**
Total = Contact hours: 25.50; Credits : 20.25				

Level –2, Term-II

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CSE-213	Computer Architecture	3.00	-	3.00
CSE-215	Data Structures and Algorithms-II	3.00	-	3.00
CSE-216	Data Structures and Algorithms-II Sessional	-	3.00	1.50
CSE-219	Mathematical Analysis for Computer Science	3.00	-	3.00
CSE-220	Object Oriented Programming Sessional-II	-	4.00	2.00
EECE-279	Digital Electronics and Pulse Technique	3.00	-	3.00
EECE-280	Digital Electronics and Pulse Technique Sessional	-	1.50	0.75
GELM-275	Leadership and Management	2.00	-	2.00
MATH-207	Complex Variable and Statistics	3.00	-	3.00
Total:		**17.00**	**8.50**	**21.25**
Total = Contact hours: 25.50; Credits : 21.25				

Level-3, Term-I

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CSE-301	Database Management Systems	3.00	-	3.00
CSE-302	Database Management Systems Sessional	-	3.00	1.50
CSE-303	Compiler	3.00	-	3.00
CSE-304	Compiler Sessional	-	1.50	0.75
CSE-305	Microprocessors, Micro-controllers and Assembly Language	3.00	-	3.00
CSE-306	Microprocessors, Micro-controllers and Assembly Language Sessional	-	3.00	1.50
CSE-307	Operating System	3.00	-	3.00
CSE-308	Operating System Sessional	-	1.50	0.75
CSE-317	Data Communication	3.00	-	3.00
CSE-318	Data Communication Sessional	-	1.50	0.75
Total:		**15.00**	**10.50**	**20.25**
Total = Contact hours: 25.50; Credits : 20.25				

Level-3, Term II

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CSE-309	Computer Network	3.00	-	3.00
CSE-310	Computer Network Sessional	-	3.00	1.50
CSE-315	Digital System Design	2.00	-	2.00
CSE-316	Digital System Design Sessional	-	1.50	0.75
CSE-319	Software Engineering	3.00	-	3.00
CSE-320	Software Engineering Sessional	-	1.50	0.75
CSE-364	Software Development Project	-	3.00	1.50
GERM-352	Fundamentals of Research Methodology	-	3.00	1.50
GES-301	Fundamentals of Sociology	2.00	-	2.00
GESL-303	Environment, Sustainability and Law	2.00	-	2.00
Total:		**12.00**	**12.00**	**19.00***
Total = Contact hours: 24.00; Credits : 19.00				

*LEVEL-3 Industrial Training

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CSE-350	Industrial Training	-	4 Weeks	1.00

*Note: This course is mandatory. Evaluation report from industry is to be submitted at the end of the training and accordingly to be incorporated in the tabulation sheet. Total credit of Level-3 Term-II is 19.00 Cr. Hr. including the 1.00 Cr. of CSE-350.

Level-4, Term-I

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CSE-400	Final Year Research & Design Project	-	6.00	3.00
CSE-405	Computer Interfacing	3.00	-	3.00
CSE-406	Computer Interfacing Sessional	-	1.50	0.75
CSE-415	Human Computer Interaction	3.00	-	3.00
CSE-416	Human Computer Interaction Sessional	-	1.50	0.75
CSE-403	Artificial Intelligence	3.00	-	3.00
CSE-404	Artificial Intelligence Sessional	-	1.50	0.75
CSE-4XO	Technical Elective-I	3.00	-	3.00
CSE-4XE	Technical Elective-I Sessional	-	1.50	0.75
GEEM-433	Engineering Ethics and Moral Philosophy	2.00	-	2.00
Total:		**14.00**	**12.00**	**20.00**
Total = Contact hours: 26.00; Credits : 20.00				

Technical Elective-I

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CSE-417	Blockchaining and Cryptocurrency Technology	3.00	-	3.00
CSE-418	Blockchaining and Cryptocurrency Technology Sessional	-	1.50	0.75
CSE-419	Advanced Algorithms	3.00	-	3.00
CSE-420	Advanced Algorithms Sessional			
CSE-421	Basic Graph Theory	3.00	-	3.00
CSE-422	Basic Graph Theory Sessional	-	1.50	0.75
CSE-423	Fault Tolerance System	3.00	-	3.00
CSE-424	Fault Tolerance System Sessional	-	1.50	0.75
CSE-425	Basic Multimedia Theory	3.00	-	3.00
CSE-426	Basic Multimedia Theory Sessional	-	1.50	0.75
CSE-427	Digital Image Processing	3.00	-	3.00
CSE-428	Digital Image Processing Sessional	-	1.50	0.75
CSE-431	Object Oriented Software Engineering	3.00	-	3.00

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CSE-432	Object Oriented Software Engineering Sessional	-	1.50	0.75
CSE-433	Artificial Neural Networks and Fuzzy Systems	3.00	-	3.00
CSE-434	Artificial Neural Networks and Fuzzy Systems Sessional	-	1.50	0.75
CSE-435	Distributed Algorithms	3.00	-	3.00
CSE-436	Distributed Algorithms Sessional			
CSE-437	Bioinformatics	3.00	-	3.00
CSE-438	Bioinformatics Sessional	-	1.50	0.75
CSE-439	Robotics	3.00	-	3.00
CSE-440	Robotics Sessional	-	1.50	0.75
CSE-447	Telecommunication Engineering	3.00	-	3.00
CSE-448	Telecommunication Engineering Sessional	-	1.50	0.75

Level-4, Term-II

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CSE-400	Final Year Research & Design Project	-	6.00	3.00
CSE-401	Information System Design and Development	3.00	-	3.00
CSE-429	Computer Security	3.00	-	3.00
CSE-430	Computer Security Sessional	-	1.50	0.75
CSE-413	Computer Graphics	3.00	-	3.00
CSE-414	Computer Graphics Sessional	-	1.50	0.75
CSE-4XO	Technical Elective-II	3.00	-	3.00
CSE-4XE	Technical Elective-II Sessional	-	1.50	0.75
GEPM-463	Project Management and Finance	2.00	-	2.00
Total:		**14.00**	**10.50**	**19.25**
Total = Contact hours: 24.50; Credits : 19.25				

Technical Elective-II

Course Code	Course Name	Contact Hour/ Week		Credits
		Theory	Sessional	
CSE-411	VLSI Design	3.00	-	3.00
CSE-412	VLSI Design Sessional	-	1.50	0.75
CSE-441	Machine Learning	3.00	-	3.00
CSE-442	Machine Learning Sessional	-	1.50	0.75
CSE-443	Pattern Recognition	3.00	-	3.00
CSE-444	Pattern Recognition Sessional	-	1.50	0.75
CSE-445	Digital Signal Processing	3.00	-	3.00
CSE-446	Digital Signal Processing Sessional	-	1.50	0.75
CSE-449	Mobile and Ubiquitous Computing	3.00	-	3.00
CSE-450	Mobile and Ubiquitous Computing Sessional	-	1.50	0.75
CSE- 451	Simulation and Modeling	3.00	-	3.00
CSE-452	Simulation and Modeling Sessional	-	1.50	0.75
CSE-455	Natural Language Processing	3.00	-	3.00
CSE-456	Natural Language Processing Sessional	-	1.50	0.75
CSE-457	Advanced Database Management Systems	3.00	-	3.00
CSE-458	Advanced Database Management Systems Sessional	-	1.50	0.75
CSE-459	Internet of Things (IoT)	3.00	-	3.00
CSE-460	Internet of Things (IoT) Sessional	-	1.50	0.75
CSE-461	Industrial Revolution	3.00	-	3.00
CSE-462	Industrial Revolution Sessional	-	1.50	0.75
CSE-465	Cyber & Physical Security	3.00	-	3.00
CSE-466	Cyber & Physical Security Sessional	-	1.50	0.75

DEPT OF ELECTRICAL, ELECTRONIC AND COMMUNICATION ENGINEERING

Total Credit Hours: 160.00

Level–1, Term-I

Course Code	Course Name	Type of Course	Contact Hour	Credits
EECE 101	Electrical Circuits I	Theory	3.00	3.00
PHY 101	Waves & Oscillation, Optics and Modern Physics	Theory	3.00	3.00
MATH 101	Differential and Integral Calculus	Theory	3.00	3.00
CHEM 101	Fundamentals of Chemistry	Theory	3.00	3.00
GEBS 101	Bangladesh Studies	Theory	2.00	2.00
Subtotal (Theory)			**14.00**	**14.00**
EECE 102	Electrical Circuits and Simulation Laboratory I	Sessional	3.00	1.50
PHY 102	Physics Sessional	Sessional	3.00	1.50
CHEM 102	Chemistry Sessional		3.00	1.50
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours: 23.00; Credits : 18.50				

Level–1, Term-II

Course Code	Course Name	Type of Course	Contact Hour	Credits
EECE 105	Electrical Circuits II	Theory	3.00	3.00
PHY 103	Electricity & Magnetism, Thermal Physics, Quantum Mechanics & Photonics	Theory	3.00	3.00
MATH 105	Vector Analysis, Matrices and Coordinate Geometry	Theory	3.00	3.00
CSE 109	Computer Programming	Theory	3.00	3.00
GES 101	Fundamentals of Sociology	Theory	2.00	2.00
Subtotal (Theory)			**14.00**	**14.00**
EECE 106	Electrical Circuits and Simulation Laboratory II	Sessional	3.00	1.50
CSE 110	Computer Programming Laboratory	Sessional	3.00	1.50
LANG 102	Communicative English I	Sessional	3.00	1.50
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours: 23.00; Credits: 18.50				

Level–2, Term-I

Course Code	Course Name	Type of Course	Contact Hour	Credits
EECE 201	Electronics-I	Theory	3.00	3.00
EECE 203	Electrical Machines-I/ Energy Conversion-I	Theory	3.00	3.00
ME 283	Fundamental of Mechanical Engineering	Theory	3.00	3.00
MATH 205	Differential Equation, Laplace Transform and Fourier Transform	Theory	3.00	3.00
GEE 201	Fundamentals of Economics	Theory	2.00	2.00
Subtotal (Theory)			**14.00**	**14.00**
EECE 202	Electronics Circuit and Simulation Laboratory	Sessional	3.00	1.50
EECE 212	Numerical Technique Laboratory	Sessional	3.00	1.50
ME 284	Fundamental of Mechanical Engineering Laboratory	Sessional	3.00	1.50
LANG 202	Communicative English II	Sessional	3.00	1.50
Subtotal (Sessional)			**12.00**	**6.00**
Total = Contact hours: 26.00; Credits: 20.00				

Level–2, Term-II

Course Code	Course Name	Type of course	Contact hour	Credits
EECE 205	Electrical Machines-II/ Energy Conversion-II	Theory	3.00	3.00
EECE 207	Electronics II	Theory	3.00	3.00
EECE 217	Engineering Electromagnetic	Theory	3.00	3.00
MATH 213	Complex Variable, Harmonic Function and Statistics	Theory	3.00	3.00
GELM 275	Leadership and Management	Theory	2.00	2.00
Subtotal (Theory)			**14.00**	**14.00**
EECE 206	Electrical Machines Laboratory/ Energy Conversion Laboratory	Sessional	3.00	1.50
EECE 208	Electronics Circuit and Simulation Laboratory II	Sessional	3.00	1.50
EECE 224	Electrical Service Design and CAD Laboratory	Sessional	4.00	2.00
Subtotal (Sessional)			**10.00**	**5.00**
Total = Contact hours: 24.00; Credits: 19.00				

Level-3, Term-I

Course Code	Course Name	Type of course	Contact Hour	Credits
EECE 301	Continuous Signals and Linear Systems	Theory	3.00	3.00
EECE 303	Digital Electronics	Theory	3.00	3.00
EECE 305	Power System I	Theory	3.00	3.00
EECE 313	Electrical Measurement, Instrumentation and Sensors	Theory	3.00	3.00
EECE 315	Electrical Properties of Material	Theory	3.00	3.00
GESL 305	Environment, Sustainability and Law	Theory	2.00	2.00
Subtotal (Theory)			**17.00**	**17.00**
EECE 304	Digital Electronics Laboratory	Sessional	3.00	1.50
EECE 306	Power System I Laboratory	Sessional	3.00	1.50
EECE 314	Electrical Measurement, Instrumentation and Sensors Lab	Sessional	3.00	1.50
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours : 26.00 ; Credits : 21.50				

Level-3, Term-II

Course Code	Course Name	Type of course	Contact hour	Credits
EECE 309	Communication Theory I	Theory	3.00	3.00
EECE 311	Digital Signal Processing I	Theory	3.00	3.00
EECE 317	VLSI I	Theory	3.00	3.00
CSE 371	Microprocessors and Interfacing	Theory	3.00	3.00
Subtotal (Theory)			**12.00**	**12.00**
GERM 352	Fundamentals of Research Methodology	Sessional	4.00	2.00
EECE 310	Communication Theory I Laboratory	Sessional	3.00	1.50
EECE 312	Digital Signal Processing I Laboratory	Sessional	3.00	1.50
EECE 318	VLSI I Laboratory	Sessional	3.00	1.50
CSE 372	Microprocessors and Interfacing Laboratory	Sessional	3.00	1.00
EECE 330	Industrial Training	Sessional	1.00	1.00
Subtotal (Sessional)			**16+1 (6 weeks)**	**9.00**
Total = Contact hours : 29.00; Credits: 21.00				

Level-4, Term-I

Course No	Course Name	Type of Course	Contact hour	Credits
EECE 401	Control System I	Theory	3.00	3.00
EECE 405	Solid State Devices	Theory	3.00	3.00
EECE 4**	Elective I	Theory	3.00	3.00
EECE 4**	Elective II	Theory	3.00	3.00
EECE 4**	Elective III	Theory	3.00	3.00
Subtotal (Theory)			**15.00**	**15.00**
EECE 400	Final Year Design and Research Project	Sessional	6.00	3.00
EECE 402	Control System I Laboratory	Sessional	3.00	1.50
EECE 408	AI and Machine Learning Laboratory	Sessional	2.00	1.00
EECE 4**	Elective I Laboratory	Sessional	3.00	1.50
Subtotal (Sessional)			**14.00**	**7.00**
Total = Contact hours : 29.00; Credits : 22.00				

Level-4, Term-II

Course No	Course Name	Type of course	Contact hour	Credits
EECE 405	Solid State Devices	Theory	3.00	3.00
GEEM 435	Engineering Ethics and Moral Philosophy	Theory	2.00	2.00
GEPM 465	Project Management and Finance	Theory	2.00	2.00
EECE 4**	Elective IV	Theory	3.00	3.00
EECE 4**	Elective V	Theory	3.00	3.00
EECE 4**	Elective VI	Theory	3.00	3.00
Subtotal (Theory)			**16.00**	**16.00**
EECE 400	Final Year Design and Research Project	Sessional	6.00	3.00
EECE 4**	Elective III Laboratory	Sessional	3.00	1.50
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours : 25.00 ; Credits: 20.50				

List of Elective Courses

Power

Ser. No.	Course Code	Course Name	Level	Contact Hour	Credits
1	EECE 471	Power System II	4-I/ 4-II	3.00	3.00
2	EECE 475	Power Plant Engineering	4-I/ 4-II	3.00	3.00
3	EECE 477	Power System Protection	4-I/ 4-II	3.00	3.00
4	EECE 478	Power System Protection Laboratory	4-II	3.00	1.50
5	EECE 483	High Voltage Engineering	4-I/ 4-II	3.00	3.00
6	EECE 484	High Voltage Engineering Laboratory	4-II	3.00	1.50
7	EECE 479	Power System Reliability	4-I/ 4-II	3.00	3.00
8	EECE 481	Power System Operation and Control	4-I/ 4-II	3.00	3.00
9	EECE 485	Electrical Machines III / Energy Conversion III	4-I/ 4-II	3.00	3.00

Electronics

Ser. No.	Course Code	Course Name	Level	Contact Hour	Credits
1	EECE 451	Processing and Fabrication Technology	4-I/ 4-II	3.00	3.00
2	EECE 453	Analog Integrated Circuits	4-I/ 4-II	3.00	3.00
3	EECE 455	Compound Semiconductor and Hetero-junction Devices	4-I/ 4-II	3.00	3.00
4	EECE 457	VLSI II	4-I/ 4-II	3.00	3.00
5	EECE 458	VLSI II Laboratory	4-II	3.00	1.00
6	EECE 459	Optoelectronics	4-I/ 4-II	3.00	3.00
7	EECE 461	Semiconductor Device Theory	4-I/ 4-II	3.00	3.00
8	EECE 463	Introduction to Nanotechnology	4-I/ 4-II	3.0	3.00
9	EECE 465	Semiconductor and Nano-scale Devices	4-I/ 4-II	3.00	3.00

Communication

Ser. No.	Course Code	Course Name	Level	Contact Hour	Credits
1	EECE 403	Telecommunication Engineering	4-I/ 4-II	3.00	3.00
2	EECE 433	Microwave Engineering	4-I/ 4-II	3.00	3.00
3	EECE 434	Microwave Engineering Laboratory	4-II	3.00	1.50
4	EECE 435	Optical Fiber Communication	4-I/ 4-II	3.00	3.00
5	EECE 437	Digital Communication	4-I/ 4-II	3.00	3.00
6	EECE 438	Digital Communication Laboratory	4-II	3.00	1.50
7	EECE 439	Mobile Cellular Communication	4-I/ 4-II	3.00	3.00
8	EECE 441	Random Signals and Processes	4-I/ 4-II	3.00	3.00
9	EECE 443	Satellite Communication	4-I/ 4-II	3.00	3.00
10	EECE 444	Satellite Communication Laboratory	4-II	3.00	1.50
11	EECE 445	Communications Network	4-I/ 4-II	3.00	3.00
12	EECE 446	Communications Network Laboratory	4-II	3.00	1.50

Interdisciplinary

Ser. No.	Course Number	Course Name	Level	Contact Hour	Credits
1	EECE 421	Control System II	4-I/ 4-II	3.00	3.00
2	EECE 422	Control System II Laboratory	4-II	3.00	1.50
3	EECE 423	Numerical Methods	4-I/ 4-II	3.00	3.00
4	EECE 424	Numerical Methods Laboratory	4-II	3.00	1.50
5	EECE 425	Biomedical Instrumentation	4-I/ 4-II	3.00	3.00
6	EECE 426	Biomedical Instrumentation Laboratory	4-II	3.00	1.50
7	EECE 429	Radar Engineering	4-I/ 4-II	3.00	3.00
8	EECE 430	Radar Engineering Laboratory	4-II	3.00	1.50
9	EECE 491	Sonar and Underwater Engineering	4-I/ 4-II	3.00	3.00
10	EECE 492	Sonar and Underwater Engineering Laboratory	4-II	3.00	1.50
11	EECE 493	Electronics Warfare	4-I/ 4-II	3.00	3.00
12	EECE 494	Electronics Warfare Laboratory	4-II	3.00	1.50
13	EECE 495	Avionics Engineering	4-I/ 4-II	3.00	3.00
14	EECE 496	Avionics Engineering Laboratory	4-II	3.00	1.500
15	EECE 497	Biomedical Signal Processing	4-I/ 4-II	3.00	3.00
16	EECE 498	Biomedical Signal Processing Laboratory	4-II	3.00	1.50
17	CSE 491	Microprocessor System Design	4-I/ 4-II	3.00	3.00
18	CSE 492	Microprocessor System Design Laboratory	4-II	3.00	1.50

FACULTY OF MECHANICAL ENGINEERING

DEPT OF MECHANICAL ENGINEERING

Total Credit Hours: 160.0

LEVEL-1, TERM-I

Course Code	Course Name	Type of Course	Contact hours	Credits
ME 161	Introduction to Mechanical Engineering	Theory	2.00	2.00
ME 193	Engineering Materials	Theory	3.00	3.00
EECE 159	Fundamentals of Electrical Engineering	Theory	3.00	3.00
PHY 101	Physics (Waves and Oscillations, Optics and Modern Physics)	Theory	3.00	3.00
MATH 101	Differential and Integral Calculus	Theory	3.00	3.00
GEBS 101	Bangladesh Studies	Theory	2.00	2.00
Subtotal (Theory)			**16.00**	**16.00**
PHY 102	Physics Sessional	Sessional	3.00	1.50
ME 194	Engineering Materials Sessional	Sessional	3.00	1.50
SHOP 162	Workshop Practice Sessional	Sessional	3.00	1.50
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours: 25.00; Credits: 20.50				

LEVEL-1, TERM-II

Course Code	Course Name	Type of Course	Contact hours	Credits
ME 103	Thermodynamics	Theory	3.00	3.00
CHEM 101	Fundamentals of Chemistry	Theory	3.00	3.00
MATH 103	Differential Equations and Matrix	Theory	3.00	3.00
EECE 173	Electrical and Electronics Technology	Theory	3.00	3.00
GES 107	Fundamentals of Sociology	Theory	2.00	2.00
Subtotal (Theory)			**14.00**	**14.00**
CHEM 102	Chemistry Sessional	Sessional	3.00	1.50
LANG 102	Communicative English I	Sessional	3.00	1.50
ME 104	Thermodynamics Sessional	Sessional	3.00	1.50
EECE 174	Electrical and Electronics Technology Sessional	Sessional	3.00	1.50
Subtotal (Sessional)			**12.00**	**6.00**
Total = Contact hours: 26.00; Credits:20.00				

LEVEL-2, TERM-I

Course Code	Course Name	Type of Course	Contact hours	Credits
CSE 275	Computer Programming Language	Theory	3.00	3.00
ME 245	Engineering Mechanics-I	Theory	3.00	3.00
MATH 201	Vector Analysis, Laplace Transform & Co-ordinate Geometry	Theory	3.00	3.00
ME 221	Fluid Mechanics - I	Theory	3.00	3.00
GEE 205	Fundamentals of Economics	Theory	2.00	2.00
Subtotal (Theory)			**14.00**	**14.00**
CSE 276	Computer Programming Language Sessional	Sessional	3.00	1.50
ME 258	Mechanical Engineering Drawing – I	Sessional	3.00	1.50
ME 222	Fluid Mechanics Sessional	Sessional	1.50	0.75
LANG 202	Communicative English II	Sessional	3.00	1.50
Subtotal (Sessional)			**10.50**	**5.25**
Total = Contact hours: 24.50; Credits: 19.25				

LEVEL-2, TERM-II

Course Code	Course Name	Type of Course	Contact hours	Credits
ME 247	Engineering Mechanics - II	Theory	3.00	3.00
ME 243	Mechanics of Solids	Theory	3.00	3.00
ME 223	Fluid Mechanics – II	Theory	3.00	3.00
MATH 265	Complex Variable, Harmonic Function and Fourier Analysis	Theory	3.00	3.00
GELM 275	Leadership and Management	Theory	2.00	2.00
ME 263	Numerical Analysis	Theory	3.00	3.00
Subtotal (Theory)			**17.00**	**17.00**
ME 244	Mechanics of Solids Sessional	Sessional	3.00	1.50
ME 224	Fluid Mechanics – II Sessional	Sessional	1.50	0.75
ME 264	Numerical Analysis Sessional	Sessional	3.00	1.50
ME 260	Mechanical Engineering Drawing –II	Sessional	3.00	1.50
Subtotal (Sessional)			**10.50**	**5.25**
Total = Contact hours: 27.50; Credits: 22.25				

LEVEL-3, TERM-I

Course Code	Course Name	Type of Course	Contact hours	Credits
ME 305	Heat and Mass transfer	Theory	3.00	3.00
ME 361	Instrumentation and Measurement	Theory	2.00	2.00
ME 333	Manufacturing Technology	Theory	3.00	3.00
ME 341	Machine Design – I	Theory	3.00	3.00
ME 321	Fluid Machinery	Theory	3.00	3.00
Subtotal (Theory)			**14.00**	**14.00**
ME 306	Heat and Mass transfer Sessional	Sessional	3.00	1.50
ME 334	Manufacturing Technology Sessional	Sessional	3.00	1.50
GERM 352	Fundamentals of Research Methodology	Sessional	4.00	2.00
ME 366	Engineering Sessional Simulation	Sessional	1.00	2.00
Subtotal (Sessional)			**11.00**	**7.00**
Total = Contact hours: 25.00; Credits: 21.00				

LEVEL-3, TERM-II

Course Code	Course Name	Type of Course	Contact hours	Credits
ME 307	Heat Transfer Equipment Design	Theory	3.00	3.00
ME 345	Mechanics of Machinery	Theory	3.00	3.00
ME 375	Control Engineering	Theory	3.00	3.00
ME 343	Machine Design – II	Theory	3.00	3.00
ME 301	IC Engine	Theory	3.00	3.00
Subtotal (Theory)			**15.00**	**15.00**
ME 302	IC Engine Sessional	Sessional	3.00	1.50
ME 346	Mechanics of Machinery Sessional	Sessional	3.00	1.50
ME 376	Control Engineering Sessional	Sessional	3.00	1.50
ME 372	Industrial Training*	Sessional	04 weeks	1.00
Subtotal (Sessional)			**9 Hr + 4 weeks**	**5.50**
Total = Contact hours: 24.00 + 4 weeks; Credits: 20.50				

LEVEL- 4, TERM-I

Course Code	Course Name	Type of Course	Contact hours	Credits
GEPM 467	Project Management & Finance	Theory	2.00	2.00
ME 403	Power Plant Engineering	Theory	3.00	3.00
ME 467	Automobile Engineering	Theory	3.00	3.00
OPTIONAL – I	Selected from prescribed optional subjects	Theory	3.00	3.00
OPTIONAL – II	Selected from prescribed optional subjects	Theory	3.00	3.00
Subtotal (Theory)			**14.00**	**14.00**
ME 404	Power plant Engineering Sessional	Sessional	3.00	1.50
ME 468	Automobile Engineering Sessional	Sessional	3.00	1.50
ME 400	Final Year Design and Research Project	Sessional	6.00	3.00
Subtotal (Sessional)			**12.00**	**6.00**
Total = Contact hours: 26.00; Credits: 20.00				

LEVEL- 4, TERM – II

Course Code	Course Name	Type of Course	Contact hours	Credits
ME 405	Heating, Ventilation and Air conditioning	Theory	3.00	3.00
GESL 407	Environment, Sustainability and Law	Theory	2.00	2.00
GEEM 437	Engineering Ethics & Moral Philosophy	Theory	2.00	2.00
OPTIONAL – III[2]	Selected from prescribed optional subjects	Theory	3.00	3.00
OPTIONAL – IV[2]	Selected from prescribed optional subjects	Theory	3.00	3.00
Subtotal (Theory)			**13.00**	**13.00**
IPE 464	CAD/ CAM Simulation Sessional	Sessional	3.00	1.50
ME 400	Final Year Design and Research Project	Sessional	6.00	3.00
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours: 22.00; Credits: 17.50				

List of Elective Courses

Course No	Course Name	Level-Term	Contact Hours	Credit Hours
ME 407	Advanced Thermodynamics	4-I or 4-II	3.0	3.0
ME 409	Renewable Energy	4-I or 4-II	3.0	3.0
ME 411	Combustion and Pollution	4-I or 4-II	3.0	3.0
ME 413	Energy and Environment	4-I or 4-II	3.0	3.0
ME 445	Noise and Vibration	4-I or 4-II	3.0	3.0
ME 417	Multiphase Flows	4-I or 4-II	3.0	3.0
ME 419	Introduction to Nanomaterials and Nanotechnology	4-I or 4-II	3.0	3.0
ME 423	Fluid Engineering	4-I or 4-II	3.0	3.0
ME 425	Aerodynamics	4-I or 4-II	3.0	3.0
ME 427	Applied Engineering Mathematics	4-I or 4-II	3.0	3.0
ME 429	Gas Dynamics	4-I or 4-II	3.0	3.0
ME 431	Finite Element Method	4-I or 4-II	3.0	3.0
ME 433	Fluid Power and Control	4-I or 4-II	3.0	3.0
ME 435	Introduction to CFD	4-I or 4-II	3.0	3.0
ME 437	Design of Fluid Machines	4-I or 4-II	3.0	3.0
ME 439	Bio-Fluid Mechanics	4-I or 4-II	3.0	3.0
ME 441	Theory of Structures	4-I or 4-II	3.0	3.0
ME 447	Robotics	4-I or 4-II	3.0	3.0
ME 449	Composite Materials	4-I or 4-II	3.0	3.0
ME 451	Aircraft & Aero-engine Structure	4-I or 4-II	3.0	3.0
ME 453	Applied Aerodynamics	4-I or 4-II	3.0	3.0
ME 455	Fire Safety and Engineering	4-I or 4-II	3.0	3.0
ME 459	Preventive Maintenance	4-I or 4-II	3.0	3.0
ME 463	Petroleum Engineering	4-I or 4-II	3.0	3.0
ME 465	Automotive Chassis Engineering	4-I or 4-II	3.0	3.0
ME 467	Autotronics	4-I or 4-II	3.0	3.0
ME 469	Vehicle Dynamics	4-I or 4-II	3.0	3.0
ME 471	Bio-Engineering	4-I or 4-II	3.0	3.0
ME 473	Plastic Process Technology	4-I or 4-II	3.0	3.0
ME 475	Modern Manufacturing Technology	4-I or 4-II	3.0	3.0
ME 477	Metal Cutting Processes	4-I or 4-II	3.0	3.0
ME 479	Occupational Health and safety engineering	4-I or 4-II	3.0	3.0
ME 483	Standards and inspection	4-I or 4-II	3.0	3.0
ME 485	Introduction to Nuclear Engineering	4-I or 4-II	3.0	3.0
ME 487	Tools Engineering	4-I or 4-II	3.0	3.0
ME 489	Automobile Maintenance Engineering	4-I or 4-II	3.0	3.0
ME 491	Mems Devices - Design and Fabrication	4-I or 4-II	3.0	3.0
ME 493	Material Handling	4-I or 4-II	3.0	3.0
ME 495	Mechatronics	4-I or 4-II	3.0	3.0
ME 497	Textile Technology	4-I or 4-II	3.0	3.0
ME 499	Weapon Engineering	4-I or 4-II	3.0	3.0

DEPT OF AERONAUTICAL ENGINEERING

Total Credit Hours: Aerospace 160.00 & Avionics 160.00

LEVEL-1, TERM-I (Aerospace & Avionics)

Course Code	Course Name	Type of Course	Contact Hour	Credits
PHY 117	Waves and Oscillations, Optics and Modern Physics	Theory	3.00	3.00
EECE 161	Electrical Circuit Analysis-I	Theory	3.00	3.00
MATH 101	Differential and Integral Calculus	Theory	3.00	3.00
AE101	Introduction to Aeronautical Engineering	Theory	3.00	3.00
GEBS101	Bangladesh Studies	Theory	2.00	2.00
Subtotal (Theory)			**14.00**	**14.00**
LANG102	Communicative English-I	Sessional	3.00	1.50
EECE162	Electrical Circuit Analysis-I Sessional	Sessional	3.00	1.50
SHOP108	Workshop Technology Sessional –I	Sessional	1.50	0.75
AE110	Aeronautical Engineering Drawing-I	Sessional	3.00	1.50
Subtotal (Sessional)			**10.50**	**5.25**
Total = Contact hours: 24.50; Credits: 19.25				

LEVEL 1, TERM-II (Aerospace and Avionics)

Course Code	Course Name	Type of Course	Contact Hour	Credits
PHY 119	Electricity and Magnetism, Thermal Physics and Mechanics	Theory	3.00	3.00
CHEM 101	Fundamentals of Chemistry	Theory	3.00	3.00
MATH 103	Differential Equations and Matrix	Theory	3.00	3.00
CSE 173	Computer Programming and Application	Theory	3.00	3.00
GEA 101	Principles of Accounting	Theory	2.00	2.00
GES 101	Fundamentals of Sociology	Theory	2.00	2.00
Subtotal (Theory)			**16.00**	**16.00**
CHEM 102	Chemistry Sessional	Sessional	3.00	1.50
LANG 102	Communicative English-I	Sessional	3.00	1.50
CSE 174	Computer Programming and Application Sessional	Sessional	3.00	1.50
SHOP 112	Workshop Technology Sessional –II	Sessional	1.50	0.75
Subtotal (Sessional)			**10.50**	**5.25**
Total = Contact hours: 26.50; Credits: 21.25				

LEVEL-2, TERM-I (Aerospace)

Course Code	Course Name	Type of Course	Contact Hour	Credits
ME 249	Engineering Mechanics (Statics and Dynamics)	Theory	4.00	4.00
AE 205	Numerical Analysis and Application	Theory	3.00	3.00
AE 213	Electronics-I	Theory	3.00	3.00
MATH 201	Vector Analysis, Laplace Transform and Co-ordinate Geometry	Theory	3.00	3.00
GEE 201	Fundamentals of Economics	Theory	2.00	2.00
Subtotal (Theory)			**15.00**	**15.00**
AE 206	Numerical Analysis and Application Sessional	Sessional	3.00	1.50
AE 214	Electronics-I Sessional	Sessional	1.50	0.75
LANG 202	Communicative English-II	Sessional	3.00	1.50
Subtotal (Sessional)			**7.50**	**3.75**
Total = Contact hours: 22.50 Credits: 18.75				

LEVEL-2, TERM-I (Avionics)

Course Code	Course Name	Type of Course	Contact Hour	Credits
AE 213	Electronics-I	Theory	3.00	3.00
AEAV 211	Electrical Circuit Analysis- II	Theory	3.00	3.00
AE 205	Numerical Analysis and Applications	Theory	3.00	3.00
ME 249	Engineering Mechanics (Statics and Dynamics)	Theory	4.00	4.00
MATH 201	Vector Analysis, Laplace Transform and Coordinate Geometry	Theory	3.00	3.00
GEE 201	Fundamentals of Economics	Theory	2.00	2.00
Subtotal (Theory)			**18.00**	**18.00**
AEAV 212	Electrical Circuit Analysis- II Sessional	Sessional	1.50	0.75
AE 206	Numerical Analysis and Applications Sessional	Sessional	3.00	1.50
AE 214	Electronics-I Sessional	Sessional	1.50	0.75
LANG 202	Communicative English-II	Sessional	3.00	1.50
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours: 27.00; Credits: 22.50				

LEVEL-2, TERM-II (Aerospace)

Course Code	Course Name	Type of Course	Contact Hour	Credits
AE 203	Fundamentals of Fluid Mechanics	Theory	3.00	3.00
AEAS 205	Mechanics of Solids	Theory	3.00	3.00
AE 207	Thermodynamics	Theory	3.00	3.00
AEAS 225	Aircraft Systems	Theory	3.00	3.00
GELM 275	Leadership and Management	Theory	2.00	2.00
MATH 221	Complex Variable, Fourier Analysis	Theory	3.00	3.00
Subtotal (Theory)			**17.00**	**17.00**
AEAS 204	Fundamentals of Fluid Mechanics Sessional	Sessional	1.50	0.75
AEAS 206	Mechanics of Solids Sessional	Sessional	3.00	1.50
AE 208	Thermodynamics Sessional	Sessional	1.50	0.75
AE 210	Aeronautical Engineering Drawing-II	Sessional	3.00	1.50
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours: 26.00; Credits: 21.50				

LEVEL-2, TERM-II (Avionics)

Course Code	Course Name	Type of Course	Contact Hour	Credits
AEAV 223	Electronics-II	Theory	3.00	3.00
AEAV 217	Aircraft Electrical System	Theory	3.00	3.00
AE 203	Fundamentals of Fluid Mechanics	Theory	3.00	3.00
AE 207	Thermodynamics	Theory	3.00	3.00
GELM 275	Leadership and Management	Theory	2.00	2.00
MATH 221	Complex Variable, Fourier Analysis	Theory	3.00	3.00
Subtotal (Theory)			**17.00**	**17.00**
AEAV 224	Electronics-II Sessional	Sessional	1.50	0.75
AEAV 218	Aircraft Electrical System Sessional	Sessional	1.50	0.75
AEAS 208	Thermodynamics Sessional	Sessional	1.50	0.75
AEAS 210	Aeronautical Engineering Drawing-II	Sessional	3.00	1.50
Subtotal (Sessional)			**7.50**	**3.75**
Total = Contact hours: 24.50; Credits: 20.75				

LEVEL-3, TERM-I (Aerospace)

Course Code	Course Name	Type of Course	Contact Hour	Credits
AEAS 301	Heat Transfer	Theory	3.00	3.00
AEAS 331	Material Science & Aerospace Materials	Theory	3.00	3.00
AE 335	Applied Aerodynamics	Theory	3.00	3.00
AE 337	Aerospace Propulsion	Theory	3.00	3.00
AE/AEAS 3XX	Elective I	Theory	3.00	3.00
GEEM 339	Engineering Ethics and Moral Philosophy	Theory	2.00	2.00
Subtotal (Theory)			**17.00**	**17.00**
AE 336	Applied Aerodynamics Sessional	Sessional	1.50	0.75
AE 338	Aerospace Propulsion Sessional	Sessional	1.50	0.75
AEAS 302	Heat Transfer Sessional	Sessional	1.50	0.75
AEAS 332	Material Science & Aerospace Materials Sessional	Sessional	1.50	0.75
AE 350	Probability and Statistics for Aeronautical Engineering	Sessional	4.00	2.00
Subtotal (Sessional)			**10.00**	**5.00**
Total = Contact hours: 27.00; Credits: 22.00				

LEVEL- 3, TERM – I (Avionics)

Course Code	Course Name	Type of Course	Contact Hour	Credits
AEAV 301	Digital Systems	Theory	3.00	3.00
AEAV 303	Signals and Systems	Theory	3.00	3.00
AE 335	Applied Aerodynamics	Theory	3.00	3.00
AE 337	Aerospace Propulsion	Theory	3.00	3.00
AE/AEAV 3XX	Elective I	Theory	3.00	3.00
GEEM 339	Engineering Ethics and Moral Philosophy	Theory	2.00	2.00
Subtotal (Theory)			**17.00**	**17.00**
AEAV 302	Digital Systems Sessional	Sessional	3.00	1.5
AE 338	Aerospace Propulsion Sessional	Sessional	1.50	0.75
AE 336	Applied Aerodynamics Sessional	Sessional	1.50	0.75
AE 350	Probability and Statistics for Aeronautical Engineering	Sessional	4.00	2.00
Subtotal (Sessional)			**10.00**	**5.00**
Total = Contact hours: 27.00; Credits: 22.00				

LEVEL-3, TERM-II (Aerospace)

Course Code	Course Name	Type of Course	Contact Hour	Credits
AE 329	Measurement and Aircraft Instruments	Theory	3.00	3.00
AEAS 317	Mechanics of Structures, Structural Vibration and Aero Elasticity	Theory	4.00	4.00
AEAS 319	Machine Design	Theory	3.00	3.00
AE/AEAS 3XX	Elective II	Theory	3.00	3.00
AEAS 325	Computational Fluid Dynamics	Theory	3.00	3.00
Subtotal (Theory)			**16.00**	**16.00**
AE 300	Industrial Training	Sessional	8 weeks	1.00
AE 330	Measurement and Aircraft Instruments Sessional	Sessional	1.50	0.75
AEAS 326	Computational Fluid Dynamics Sessional	Sessional	1.50	0.75
GERM 350	Fundamentals of Research Methodology	Sessional	2.00	1.00
AEAS 320	Machine Design Sessional	Sessional	1.50	0.75
Subtotal (Sessional)			**6.50 hr + 8 weeks**	**4.25**
Total = Contact hours: 22.50+8 weeks; Credits: 20.25				

LEVEL-3, TERM – II (Avionics)

Course Code	Course Name	Type of Course	Contact Hour	Credits
AEAV 305	Communication Engineering	Theory	3.00	3.00
AEAV 307	Electro-Magnetic Field Theory	Theory	3.00	3.00
AEAV 313	Digital Signal Processing	Theory	3.00	3.00
AE/AEAV 3XX	Elective II	Theory	3.00	3.00
AE 329	Measurement and Aircraft Instruments	Theory	3.00	3.00
Subtotal (Theory)			**15.00**	**15.00**
AE 300	Industrial Training	Sessional	8 weeks	1.00
AEAV 306	Communication Engineering Sessional	Sessional	1.50	0.75
AEAV 314	Digital Signal Processing Sessional	Sessional	1.50	0.75
AE 330	Measurement and Aircraft Instruments Sessional	Sessional	1.50	0.75
GERM 350	Fundamentals of Research Methodology	Sessional	2.00	1.00
Subtotal (Sessional)			**6.50 hr + 8 weeks**	**5.25**
Total = Contact hours: 21.50+8 weeks; Credits:19.25				

LEVEL-4, TERM-I (Aerospace)

Course Code	Course Name	Type of Course	Contact Hour	Credits
AEAS 405	Aerospace Vehicle Design	Theory	3.00	3.00
AEAS 411	Control Systems Engineering	Theory	3.00	3.00
AEAS 447	Space Engineering	Theory	3.00	3.00
GESL 409	Environment Sustainability and Law	Theory	2.00	2.00
AE/AEAS 4XX	Elective III	Theory	3.00	3.00
Subtotal (Theory)			**14.00**	**14.00**
AE 400	Final Year Design and Research Project	Sessional	6.00	3.00
AE 412	Control Systems Engineering Sessional	Sessional	1.50	0.75
AEAS 406	Aerospace Vehicle Design Sessional	Sessional	1.50	0.75
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours: 23.00; Credits: 18.50				

LEVEL-4, TERM – I (Avionics)

Course Code	Course Name	Type of Course	Contact Hour	Credits
AEAV 401	Microwave Engineering	Theory	3.00	3.00
AE 411	Control Systems Engineering	Theory	3.00	3.00
AE 447	Space Engineering	Theory	3.00	3.00
GESL 409	Environment Sustainability and Law	Theory	2.00	2.00
AE/AEAV 4XX	Elective III	Theory	3.00	3.00
Subtotal (Theory)			**14.00**	**14.00**
AE 400	Final Year Design and Research Project	Sessional	6.00	3.00
AE 412	Control Systems Engineering Sessional	Sessional	1.50	0.75
AEAV 402	Microwave Engineering Sessional	Sessional	1.50	0.75
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours: 23.00; Credits: 18.50				

LEVEL-4, TERM-II (Aerospace)

Course Code	Course Name	Type of Course	Contact Hour	Credits
AEAS 407	Turbo Machinery	Theory	3.00	3.00
AEAS 413	High Speed Aerodynamics	Theory	3.00	3.00
AEAS 439	Rotor-dynamics and Aircraft Performance	Theory	3.00	3.00
GEPM 469	Project Management and Finance	Theory	2.00	2.00
AE/AEAS 4XX	Elective IV	Theory	3.00	3.00
Subtotal (Theory)			**14.00**	**14.00**
AE 400	Final Year Design and Research Project	Sessional	6.00	3.00
AEAS 408	Turbo Machinery Sessional	Sessional	1.50	0.75
AEAS 414	High Speed Aerodynamics Sessional	Sessional	1.50	0.75
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours: 23.00; Credits: 18.50				

LEVEL- 4, TERM – II (Avionics)

Course Code	Course Name	Type of Course	Contact Hour	Credits
AEAV 407	Radar Engineering	Theory	3.00	3.00
AEAV 443	Aircraft Communication and Navigation	Theory	4.00	4.00
GEPM 469	Project Management and Finance	Theory	2.00	2.00
AE/AEAV 4XX	Elective IV	Theory	3.00	3.00
Subtotal (Theory)			**12.00**	**12.00**
AE 400	Final Year Design and Research Project	Sessional	6.00	3.00
AEAV 408	Radar Engineering Sessional	Sessional	1.50	0.75
AEAV 444	Aircraft Communication and Navigation Sessional	Sessional	1.50	0.75
Subtotal (Sessional)			**9.00**	**4.50**
Total = Contact hours: 21.00; Credits: 16.50				

DEPT OF NAVAL ARCHITECTURE AND MARINE ENGINEERING

Total Credit Hours: 160.00

Level–1, Term-I

Course Code	Course Name	Contact Hour	Credits
Theory Courses			
NAME 107	Introduction to Naval Architecture and Marine Engineering	3.00	3.00
CHEM 101	Fundamentals of Chemistry	3.00	3.00
MATH 101	Differential Calculus and Integral Calculus	3.00	3.00
PHY 101	Wave Oscillation, Optics and Modern Physics	3.00	3.00
GEBS 101	Bangladesh Studies	2.00	2.00
Sessional Courses			
CHEM 102	Chemistry Lab	3.00	1.50
LANG 102	Basic Communicative English	3.00	1.50
ME 150	Mechanical Engineering Drawing	3.00	1.50
SHOP 180	Workshop Practice (Foundry, Welding and Machine Shop)	3.00	1.50
Total (5T + 4S)		**26.00**	**20.00**

LEVEL-1, TERM-II

Course Code	Course Name	Contact Hour	Credits
Theory Courses			
NAME 157	Hydrostatics and Stability	3.00	3.00
NAME 177	Thermal Engineering	3.00	3.00
CSE 115	Computer Programming Language	3.00	3.00
MATH 103	Differential Equation and Matrix	3.00	3.00
PHY 113	Properties and Structure of Matter, Electricity and Magnetism	3.00	3.00
Sessional Courses			
NAME 158	Basic Ship Design	3.00	1.50
NAME 178	Thermal Engineering Lab	3.00	1.50
PHY 102	Physics Lab	3.00	1.50
CSE 116	Computer Programming Lab	3.00	1.50
Total (5T + 4S)		**27.00**	**21.00**

LEVEL-2, TERM-I

Course Code	Course Name	Contact Hour	Credits
Theory Courses			
NAME 201	Mechanics of Structure	3.00	3.00
NAME 205	Shipbuilding Materials and Metallurgy	3.00	3.00
NAME 207	Ship Design	3.00	3.00
NAME 213	Fluid Mechanics	3.00	3.00
MATH 201	Vector Analysis, Laplace and Coordinate Geometry	3.00	3.00
Sessional Courses			
NAME 208	Computer Aided Ship Design - I	3.0	1.5
NAME 214	Fluid Mechanics Lab	3.0	1.5
LANG 2XX	Optional Language Lab*	3.0	1.5
NAME 202	Mechanics of Structure Lab	1.5	0.75
Total (5T + 3S)		**25.50**	**20.25**

LEVEL- 2, TERM- II

Course Code	Course Name	Contact Hour	Credits
Theory Courses			
NAME 253	Marine Hydrodynamics	3.0	3.0
ME 277	Heat Transfer	3.0	3.0
EECE 281	Marine Electrical and Electronics	4.0	4.0
MATH 219	Statistics, Complex Variable and Fourier Analysis	3.0	3.0
GELM 275	Leadership & Management	2.0	2.0
Sessional Courses			
ME 278	Heat Transfer Lab	3.0	1.5
NAME 206	Shipbuilding Materials and Metallurgy Lab	1.5	0.75
NAME 254	Marine Hydrodynamics Lab	3.0	1.5
NAME 258	Computer Aided Ship Design - II	3.0	1.5
Total (5T + 4S)		**25.50**	**20.25**

LEVEL- 3, TERM- I

Course Code	Course Name	Contact Hour	Credits
Theory Courses			
NAME 301	Ship Structure	3.00	3.00
NAME 315	Ship Construction and Welding Technology	3.00	3.00
NAME 353	Ship Resistance and Propulsion	3.00	3.00
NAME 311	Machine Elements Design	3.00	3.00
GEE 303	Fundamentals of Economics	2.00	2.00
GES 305	Fundamentals of Sociology	2.00	2.00
Sessional Courses			
NAME 300	Ship Design Project	3.00	1.50
NAME 308	Application of ship design software	3.00	1.50
EECE 382	Marine Electrical and Electronics Lab	3.00	1.50
Total (6T + 2S + 1P)		**25.00**	**20.50**

LEVEL- 3, TERM- II

Course Code	Course Name	Contact Hour	Credits
Theory Courses			
NAME 307	Design of General and Special Ships	3.00	3.00
NAME 309	Marine Engineering-I	3.00	3.00
NAME 363	Numerical Methods	3.00	3.00
GESL311	Environment, Sustainability and Industrial Law	2.00	2.00
NAME 3XX	Optional Course 1*	3.00	3.00
Sessional Courses			
NAME 300	Ship Design Project	3.00	1.50
NAME 310	Marine Engineering Lab-I	3.00	1.50
GERM 352	Fundamentals of Research Methodology	4.00	2.00
NAME 354	Ship Resistance and Propulsion Lab	3.00	1.50
Total (5T + 3S + 1P)		**27.00**	**20.50**

LEVEL- 4, TERM- I

Course Code	Course Name	Contact Hour	Credits
Theory Courses			
NAME 403	Dynamics of Marine Vehicles	3.0	3.0
NAME 409	Marine Engineering -II	3.0	3.0
GEA 407	Principles of Accounting	2.0	2.0
GEPM 471	Project Management and Finance	2.0	2.0
NAME 4XX	Optional Course 2*	3.0	3.0
Sessional Courses			
NAME 400	Research Project/ Thesis	6.00	3.00
NAME 464	Numerical Methods Lab	3.00	1.50
NAME 450	Shipyard Practice/Industrial Training (4 Weeks)**	4 weeks	1.50
Total (5T + 2S + 1RP)		**22.00 + 4 weeks**	**19.00**

LEVEL- 4, TERM- II

Course Code	Course Name	Contact Hour	Credits
Theory Courses			
NAME 457	Maritime Economics and Management	3.00	3.00
NAME 459	Marine Maintenance and Repair Engineering	3.00	3.00
GEEM 441	Engineering Ethics and Moral Philosophy	2.00	2.00
NAME 4XX	Optional Course 3*	3.00	3.00
NAME 4XX	Optional Course 4*	3.00	3.00
Sessional Courses			
NAME 400	Research Project/Thesis	6.00	3.00
NAME 410	Marine Engineering Lab-II	3.00	1.50
Total (5T + 2S + 1RP)		**23.00**	**18.50**

List of Elective/Optional Courses:

Ser.	Course Code	Course Title	Type of Course	Credit Hour	Level & Term
1	LANG 202	Advanced Communicative English	Sessional	1.50	L-2, T-I
2	LANG 204	Bangla Language and Literature	Sessional	1.50	L-2, T-I
3	NAME 335	Computer Aided Ship Production	Theory	3.00	L-3, T-II
4	NAME 337	Inland Water Transportation System	Theory	3.00	L-3, T-II
5	NAME 371	Finite Element Method for Ship Structure	Theory	3.00	L-3, T-II
6	NAME 387	Port and Harbor Engineering	Theory	3.00	L-3, T-II
7	NAME 389	Shipbuilding Project Management	Theory	3.00	L-3, T-II
8	NAME 431	Ship Hull Vibration	Theory	3.00	L-4, T-I/II
9	NAME 445	Dredger and Dredging Technology	Theory	3.00	L-4, T-I/II
10	NAME 447	Maritime Transportation System	Theory	3.00	L-4, T-I/II
11	NAME 453	Power and Propulsion System	Theory	3.00	L-4, T-I/II
12	NAME 463	Ship Performance	Theory	3.00	L-4, T-I/II
13	NAME 465	Navigation and Maritime Regulations	Theory	3.00	L-4, T-I/II
14	NAME 473	Computational Fluid Dynamics (CFD)	Theory	3.00	L-4, T-I/II
15	NAME 475	Composite Materials	Theory	3.00	L-4, T-I/II
16	NAME 477	Control Engineering	Theory	3.00	L-4, T-I/II
17	NAME 481	Optimization Method in Ship Design	Theory	3.00	L-4, T-I/II
18	NAME 483	Theory of Hydrofoils	Theory	3.00	L-4, T-I/II
19	NAME 489	Introduction to Offshore Structure	Theory	3.00	L-4, T-I/II
20	NAME 499	Shipyard Management	Theory	3.00	L-4, T-I/II

DEPT OF INDUSTRIAL AND PRODUCTION ENGINEERING

Total Credit Hours: 160.00

Level -1, Term I

Course Code	Course Title	Contact hours	Credits
IPE 101	Introduction to Industrial and Production Engineering	3	3.00
MATH 101	Differential and Integral Calculus	3	3.00
GESA 101	Sociology and Accounting	2	2.00
CHEM 109	Basic Chemistry	3	3.00
PHY 133	Waves & Oscillations, Structure of Matter, Heat and Thermodynamics	3	3.00
Total Theoretical :		**14.00**	**14.00**
PHY 134	Physics Sessional	3	1.50
SHOP 172	Machine Shop Practice	2	1.00
CHEM 110	Chemistry Sessional	3	1.50
Total Sessional :		**8.00**	**4.00**
Grand Term Total:		**22.00**	**18.00**

Level -1, Term II

Course Code	Course Title	Contact hours	Credits
MATH 103	Differential Equations and Matrix	3	3.00
IPE 105	Engineering Materials	3	3.00
EECE 171	Basic Electrical & Electronic Circuit	3	3.00
IPE 107	Engineering Economy	3	3.00
GEBS 101	Bangladesh Studies	2	2.00
BAN 1201	Bangla Language and Literature	3	3.00**
Total Theoretical :		**14**	**14.00*** **
ME 160	Engineering Drawing	3	1.50
LANG 102	Communicative English I	3	1.50 *
EECE 172	Basic Electrical & Electronic Circuit Sessional	1.50	0.75
IPE 106	Engineering Materials Sessional	3	1.50
Total Sessional :		**10.5**	**5.25**
Grand Term Total:		**24.5**	**19.25**

*For local students **For foreign students ***For local students

Level- 2, Term I

Course Code	Course Title	Contact hours	Credits
MATH 201	Vector Analysis, Laplace Transformation & Co-ordinate Geometry	3	3.00
EECE 271	Electrical Machines and Electronics	3	3.00
CSE 281	Computer Programming	3	3.00
IPE 201	Manufacturing Processesl	3	3.00
GELM 275	Leadership and Management	2	2.00
IPE 205	Probability and Statistics	3	3.00
Total Theoretical :		**17.00**	**17.00**
EECE 272	Electrical Machines and Electronics Sessional	1.50	0.75
CSE 282	Computer Programming Sessional	3.00	1.50
IPE 202	Manufacturing Processes I Sessional	1.50	0.75
IPE 200	Engineering Graphics and CAD Sessional	3.00	1.50
LANG 202	Communicative English II	3.00	1.50*
Total Sessional :		**12.00**	**6.00**
Grand Term Total:		**29.00**	**23.00**

*For local students

Level -2, Term II

Course Code	Course Title	Contact Hour	Credits
IPE 203	Manufacturing Process II	3	3.00
GEEM 243	Engineering Ethics and Moral Philosophy	2	2.00
IPE 243	Mechanics of Solids	3	3.00
IPE 251	Thermodynamics and Heat Transfer	3	3.00
MATH 215	Numerical Analysis	3	3.00
IPE 271	Engineering Mechanics and Mechanics of Machinery	3	3.00
Total Theoretical :		**17.00**	**17.00**
IPE 204	Manufacturing Processes II Sessional	1.50	0.75
IPE 206	Probability and Statistics Sessional	1.50	0.75
IPE 244	Mechanics of Solids Sessional	1.50	0.75
IPE 252	Thermodynamics and Heat Transfer Sessional	1.50	0.75
Total Sessional :		**6.00**	**3.00**
Grand Term Total:		**23.00**	**20.00**

Level 3, Term I

Course Code	Course Title	Contact Hour	Credit
IPE 351	Fluid Mechanics & Machinery	3.00	3.00
IPE 301	Measurement, Instrumentation and Control	3.00	3.00
IPE 303	Product Design I	3.00	3.00
IPE 305	Operations Research	4.00	4.00
IPE 315	Entrepreneurship Development and Micro Industries	2.00	2.00
GESL 313	Environment, Sustainability and Law	2.00	2.00
Total Theoretical:		**17.00**	**17.00**
IPE 352	Fluid Mechanics & Machinery Sessional	1.50	0.75
IPE 302	Measurement, Instrumentation and Control Sessional	1.50	0.75
IPE 306	Operations Research Sessional	1.50	0.75
GERM 352	Fundamentals of Research Methodology	4.00	2.00
Total Sessional :		**8.50**	**4.25**
Grand Term Total:		**25.5**	**21.25**

Level 3, Term II

Course Code	Course Title	Contact Hour	Credit Hour
IPE 309	Material Handling and Maintenance Management	3.00	3.00
IPE 311	Operations Management	3.00	3.00
IPE 313	Quality Management	3.00	3.00
IPE 319	Data Analytics	2.00	2.00
IPE 317	Ergonomics and Safety Management	3.00	3.00
IPE 307	Product Design II	3.00	3.00
Total Theoretical :		**17.00**	**17.00**
IPE 308	Product Design Sessional	1.50	0.75
IPE 310	Material Handling and Maintenance Management Sessional	1.50	0.75
IPE 314	Quality Management Sessional	1.50	0.75
IPE 318	Ergonomics and Safety Management	1.50	0.75
IPE 320	Industrial Practice	4 weeks	1.00
Total Sessional :		**6.00**	**4.00**
Grand Term Total:		**23.00**	**21.00**

Level 4, Term I

Course Code	Course Title	Contract Hour	Credit Hour
IPE 421	Machine Tools	3.00	3.00
IPE 419	Modeling and Simulation	3.00	3.00
IPE 415	Project Management	3.00	3.00
IPE ---	Optional I	3.00	3.00
IPE ---	Optional II	3.00	3.00
Total Theoretical :		**15.00**	**15.00**
IPE 400	Final Year Design & Research Project I	6.00	3.00
IPE 420	Modeling and Simulation Sessional	1.50	0.75
IPE 422	Machine Tools Sessional	3.00	1.50
IPE 450	Business Communication Seminar	1.50	0.75
Total Sessional :		**12.00**	**6.00**
Grand Term Total:		**27.00**	**21.00**

Level 4, Term II

Course No	Course Title	Contract Hour	Credit Hour
IPE 405	Supply Chain Management	3.00	3.00
IPE 411	CAD/CAM	3.00	3.00
IPE ---	Optional III	3.00	3.00
IPE ---	Optional IV	3.00	3.00
Total Theoretical :		**12.00**	**12.00**
IPE 400	Final Year Design & Research Project II	6.00	3.00
IPE 412	CAD/CAM Sessional	1.50	0.75
IPE 418	Mechatronics and Industrial Automation Sessional	1.50	0.75
Total Sessional :		**9.00**	**4.50**
Grand Term Total:		**21.00**	**16.50**

The grand total credit hours required for the degree of B.Sc. in Industrial and Production Engineering is **160.00**.

DEPT OF ARCHITECTURE

Total Credit Hours: 184.00

	L-1, T-1		Credits	Contact hr/wk
Core Sessional	Design Studios	ARCH 1102: Design Studio I	6	9
	Design Communication Studios	ARCH 1112: Architectural Graphics I	3	6
		ARCH 1114: Computer Application I	1.5	3
	Total Sessional :		**10.5**	**18**
Core Theory	General Education	HUM 1121: English	2	2
		MATH 1121: Mathematics	2	2
	History	ARCH 1131: History of Architecture I	2	2
		ARCH 1133: Design Theory	2	2
	Human Behaviour & Environment	ARCH 114: Ecology and Environment	2	2
	Technical System		-	-
	Practice		-	-
	Not Defined Course		-	-
	Total Core Theory		**10**	**10**
	Total Elective Theory		**0**	**0**
	Total Credit & Contact Hours of L-1, T-1 :		**20.5**	**28**

	L-1, T-2		Credits	Contact hr/wk
Core Sessional	Design Studios	ARCH1202:DesignStudioII (Prerequisite Design Studio I)	6	9
	Design Communication Studios	ARCH1212: Architectural Graphics II	3	6
		ARCH1214: Computer Application II	1.5	3
	Total Sessional :		**10.5**	**18**
Core Theory	General Education	PHY1221: Physics	2	2
		ARCH1221: Art History	2	2
	History	ARCH1231: History of Architecture II	2	2
	Human Behaviour & Environment	ARCH1241: Climate and Design	2	2
	Technical System		-	-
	Practice		-	-
	Not Defined Course		-	-
	Total Core Theory :		**8**	**8**
Elective Theory	General Education	HUM1221: Sociology	2	2
		HUM1223: Anthropology		
	History		-	-
	Human Behaviour & Environment			
	Technical System		-	-
	Practice		-	-
	Not Defined Course		-	-
	Total Elective Theory		**2**	**2**
	Total Credit & Contact Hours of L-1, T-2 :		**20.5**	**28**

	L-2, T-1		Credits	Contact hr/wk
Core Sessional	Design Studios	ARCH 2102: Design Studio III (Prerequisite Design Studio II)	8	12
	Design Communication Studios	ARCH 2114: Computer Application III	1.5	3
		ARCH 2112: Graphic Art and Sculpture	1.5	3
	Total Sessional :		**11**	**18**
Core Theory	General Education		-	-
	History	ARCH 2131: History of Architecture III	2	2
	Human Behaviour & Environment		-	-
	Technical System	ARCH 2151: Building and Finish Material	2	2
		ARCH 2153: Visual and Sonic Environment	2	2
		CE2151:Structurel	2	2
	Practice		-	-
	Not Defined Course		-	-
	Total Core Theory :		**8**	**8**
Elective Theory	General Education	HUM 2121: Logic and Philosophy	2	2
		HUM 2123: Psychology and Behaviour		
	History		-	-
	Human Behaviour & Environment		-	-
	Practice		-	-
	Not Defined Course		-	-
	Total Elective Theory :		2	2
	Total Credit & Contact Hours of L-2, T-1 :		**21**	**28**

	L-2, T-2		Credits	Contact hr/wk
Core Sessional	Design Studios	ARCH 2202: Design Studio IV (Prerequisite Design Studio III)	8	12
	Design Communication Studios	ARCH 2212: Photography and Film	1.5	3
	Technical System	ARCH 2252: Building Material and Construction	1.5	3
	Total Sessional :		**11**	**18**
Core Theory	General Education		-	-
	History	ARCH 2231: History of Architecture IV	2	2
	Human Behaviour & Environment	ARCH 2241:BasicPlanning	2	2
	Technical System	CE 2251:Structurell	2	2
		ARCH 2251: Building Services I: Mechanical and Electrical	2	2
	Practice		-	-
	Not Defined Course		-	-
	Total Core Theory		**8**	**8**
Elective Theory	General Education		-	-
	History		2	2
	Human Behaviour & Environment	ARCH 2245: Design in the Tropics		
		ARCH 2243: Green and Sustainable Architecture		
	Technical System			
	Practice			
	Not Defined Course	ARCH 2271: Vernacular Architecture		
	Total Elective Theory:		**2**	**2**
	Total Credit & Contact Hours of L-2, T-2 :		**21**	**28**

	L-3, T-1		Credits	Contact hr/wk
Core Sessional	Design Studios	ARCH 3102: Design Studio V (Prerequisite Design Studio IV)	8	12
	Design Communication Studios	ARCH 3112: Working Drawing I	1.5	3
	Total Sessional :		**9.5**	**15**
Core Theory	General Education		-	-
	History	ARCH 3131: History of Architecture V		
	Human Behaviour & Environment		2	2
	Technical System	CE3151: Structure III	2	2
		EWCE 3151: Building Services II : Plumbing	2	2
		ARCH 3151: Construction Method and Detail	2	2
	Practice		-	-
	Not Defined Course		-	-
	Total Core Theory :		**8**	**8**
Elective Theory	General Education		-	-
	History			
	Human Behaviour & Environment	ARCH3143:ArchitectureinExtreme Environment		
		ARCH3141:SpacesandFormsin Architecture		
	Technical System	ARCH3153:AdvancedConstruction and Building Technology		
		ARCH3157:ModularArchitecture, Production Line and Customization		
		ARCH3159:AmbientTechnologyand Building Environment		
		ARCH 3155: Tall Buildings and Composite Structure	2	2
	Practice			
	Not Defined Course	ARCH 3171: Bio-Design and Architecture		
	Total Elective Theory :		**2**	**2**
	Total Credit & Contact Hours of L-3, T-1 :		**19.5**	**25**

	L-3, T-2		Credits	Contact hr/wk
Core Sessional	Design Studios	ARCH3202: Design Studio VI (Prerequisite Design Studio V)	8	12
	Design Communication Studios	ARCH 3212: Working Drawing II	1.5	3
	Total Sessional :		**9.5**	**15**
Core Theory	General Education		-	-
	History	ARCH 3231: Architecture of Bengal	2	2
	Human Behaviour & Environment	ARCH 3241: Urban Design I	2	2
		ARCH 3243: Landscape Design	2	2
	Technical System	CE 3251: Structure IV	2	2
	Practice		-	-
	Not Defined Course		-	-
	Total Core Theory :		**8**	**8**
Elective Theory	General Education		-	-
	History			
	Human Behaviour & Environment		-	-
	Technical System		-	-
	Practice		-	-
	Not Defined Course		-	-
	Total Elective Theory :		**-**	**-**
	Total Credit & Contact Hours of L-3, T-2 :		**17.5**	**23**

	L-4, T-1		Credits	Contact hr/wk
Core Sessional	Design Studios	ARCH 4102: Design Studio VII (Prerequisite Design Studio VI)	8	12
	Design Communication Studios	ARCH 4112: Landscape Design Studio	1.5	3
	Total Sessional:		**9.5**	**15**
Core Theory	General Education		-	-
	History		2	2
	Human Behaviour & Environment	ARCH 4141: Interior Design	2	2
		ARCH 4143: Housing		
	Technical System		-	-
	Practice	ARCH 4161: Cost Estimation and Specification	2	2
	Not Defined Course		-	-
	Total Core Theory:		**6**	**6**
Elective Theory	General Education		-	-
	History	ARCH 4131: Post Modern Architecture	2	2
		ARCH 4133: Contemporary Architecture		
	Human Behaviour & Environment			
	Technical System			
	Practice			
	Not Defined Course	ARCH 4171: Music and Film Appreciation		
	Total Elective Theory:		**2**	**2**
	Total Credit & Contact Hours of L-4, T-1:		**17.5**	**23**

	L-4, T-2		Credits	Contact hr/wk
Core Sessional	Design Studios	ARCH 4202: Design Studio VIII (Prerequisite Design Studio VII)	8	12
	Design Communication Studios	ARCH 4212: Interior Design Studio	1.5	3
	Not Defined Course	ARCH 4272: Professional Training	1.5	3
	Total Sessional :		**11**	**18**
Core Theory	General Education		-	-
	History,		-	-
	Human Behaviour & Environment		-	-
	Technical System		-	-
	Practice	HUM4261:ProjectManagement	2	2
	Not Defined Course		-	-
	Total Core Theory :		**2**	**2**
Elective Theory	General Education		-	-
	History		-	-
	Human Behaviour & Environment	ARCH 4241: Urban Design II	2	2
		ARCH 4243: Advanced Planning		
		ARCH 4245: Rural Planning		
	Technical System			
	Practice			
	Not Defined Course	ARCH 4271: Transportation and Mobility Design		
	Total Elective Theory :		**2**	**2**
	Total Credit & Contact Hours of L-4, T-2 :		**15**	**22**

	L-5, T-1		Credits	Contact hr/wk
Core Sessional	Design Studios	ARCH 5102: Design Studio IX (Prerequisite Design Studio VIII)	10	15
	Design Communication Studios		-	-
	Not Defined Course	ARCH 5172: Seminar	1.5	3
	Total Sessional :		**11.5**	**18**
Core Theory	General Education		-	-
	History		-	-
	Human Behaviour & Environment			
	Technical System		-	-
	Practice		-	-
	Not Defined Course	ARCH 5171: Survey and Research Methods	2	2
	Total Core Theory :		**2**	**2**
Elective Theory	General Education	HUM 5121: Economics	2	2
	History			
	Human Behaviour & Environment			
	Technical System			
	Practice			
	Not Defined Course	HUM 5171: Accounting		
	Total Elective Theory :		**2**	**2**
	Total Credit & Contact Hours of L-5, T-1 :		**15.5**	**22**

	L-5, T-2		Credits	Contact hr/wk
Core Sessional	Design Studios	ARCH 5202: Design Studio X (Prerequisite Design Studio IX)	10	15
	Design Communication Studios		-	-
	Total Sessional :		**10**	**15**
Core Theory	General Education		-	-
	History		-	-
	Human Behaviour & Environment			
	Technical System		-	-
	Practice	ARCH 5261: Professional Practice	2	2
	Not Defined Course		-	-
	Total Core Theory :		**2**	**2**
Elective Theory 1	General Education		-	-
	History		-	-
	Human Behaviour & Environment			
	Technical System	ARCH 5253: Building Safety Design	2	2
	Practice			
	Not Defined Course	ARCH 5279: Disaster and Post Disaster Responsive Architecture		
Elective Theory 2	General Education		-	-
	History			
	Human Behaviour & Environment			
	Technical System	ARCH 5251: Heritage Conservation	2	2
	Practice			
	Not Defined Course	ARCH 5273: Health Facilities Planning and Design		
		ARCH 5275: Industrial and Commercial Building Design		
		ARCH 5277: Educational, Religious and Recreational Design		
		ARCH 5271: Architecture for Children and Differently-abled People		
	Total Core Theory :		**4**	**4**
	Total Credit & Contact Hours of L-5, T-2 :		**16**	**21**

DEPT OF URBAN AND REGIONAL PLANNING

Total Credit Hours: 158.00

L-1, T-1		Credit	Contact Hour/Wk
Core Sessional	ARCH 1112: Basic Design	1.5	3
	ARCH 1114: Graphics for Planners	1.5	3
	Total Core Sessional	**3.0**	**6.0**
Core Theory	MATH 1111: Mathematics I	3	3
	HUM 1111: English	2	2
	HUM 1121: Economics I	3	3
	URP 1111: Human Settlement Development	3	3
	URP 1113: Fundamentals of Planning	3	3
	URP 1171: Engineering Survey and Cartography	3	3
	Total Core Theory	**17.0**	**17.0**
Elective Theory	**Total Elective Theory**	**-**	**-**
Total		**20.0**	**23.0**

L-1, T-2		Credit	Contact Hour/Wk
Core Sessional	URP 1272: Cartography	1.5	3
	URP 1274: Engineering Survey Fieldwork	1.5	3
	URP 1202: Communication and Presentation Techniques	3	6
	CSE 1222: Database Management	1.5	3
	Total Core Sessional	**7.5**	**15**
Core Theory	MATH 1211: Mathematics II	3	3
	URP 1291: Statistics I	2	2
	HUM 1221: Economics II	3	3
	URP 1211: Urban Planning Principles	3	3
	URP 1251: Environmental Studies	2	2
	Total Core Theory	**13**	**13**
Elective Theory	**Total Elective Theory**	**-**	**-**
	Total	**20.5**	**28.0**

L-2, T-1		Credit	Contact Hour/Wk
Core Sessional	URP 2192: Computer-based Statistical Analysis	1.5	3
	CSE 2112: Introduction to Computer Programming	1.5	3
	URP 2172: Geographic Information System I	1.5	3
	Total Core Sessional	**4.5**	**9.0**
Core Theory	URP 2191: Statistics II	3	3
	URP 2171: Geographic Information System	3	3
	URP 2111: Site and Area Planning	3	3
	URP 2113: Urban Analysis Techniques	3	3
	Total Core Theory	**12.0**	**12.0**
Elective Theory (Any Two)	HUM 2131: Society and Culture	2	2
	HUM 2133: Population and Gender Studies	2	2
	HUM 2135: Social Psychology	2	2
	Total Elective Theory	**4.0**	**4.0**
	Total	**20.5**	**25.0**

L-2, T-2		Credit	Contact Hour/Wk
Core Sessional	URP 2212: Site Area Planning Studio	1.5	3
	URP 2242: Transport Planning Studio	1.5	3
	URP 2272: Geographic Information System II	1.5	3
	URP 2292: Data Analytics	3	6
	Total Core Sessional	**7.5**	**15.0**
Core Theory	ARCH 2221: Landscape Planning and Design	2	2
	URP 2271: Remote Sensing and Photogrammetry	3	3
	URP 2241: Traffic and Transportation Study	3	3
	EWCE 2211: Water Resource Planning and Management	3	3
	Total Core Theory	**11.0**	**11.0**
Elective Theory (Any One)	HUM 2221: Public Finance	2	2
	HUM 2223: Accounting	2	2
	Total Elective Theory	**2.0**	**2.0**
	Total	**20.5**	**28.0**

L-3, T-1		Credit	Contact Hour/Wk
Core Sessional	URP 3112: Urban Planning Studio	3	6
	ARCH 3122: Landscape Planning and Design Studio	1.5	3
	URP 3142: Transport Modelling	1.5	3
	URP 3172: Remote Sensing and Photogrammetry	1.5	3
	Total Core Sessional	**7.5**	**15.0**
Core Theory	HUM 3131: Local Government and Governance	3	3
	ARCH 3121: Urban Design	3	3
	ARCH 3123: Heritage and Conservation	2	2
	URP 3141: Transportation Policy and Planning	3	3
	CSE 3121: Machine Learning and Data Science	2	2
	Total Core Theory	**13.0**	**13.0**
Elective Theory	**Total Elective Theory**	**-**	**-**
	Total	**20.5**	**28.0**

L-3, T-2		Credit	Contact Hour/Wk
Core Sessional	URP 3282: Participatory Planning Studio	3	6
	CSE 3222: Machine Learning and Data Science	1.5	3
	Total Core Sessional	**4.5**	**9.0**
Core Theory	URP 3201: Research Methodology	2	2
	URP 3221: Housing and Community Development	3	3
	URP 3231: Rural Planning & Development	3	3
	URP 3233: Regional Planning and Development	3	3
	URP 3251: Environmental Planning and Management	3	3
	Total Core Theory	**14.0**	**14.0**
Elective Theory	**Total Elective Theory**	**-**	**-**
	Total	**18.5**	**23.0**

L-4, T-1		Credit	Contact Hour/Wk
Core Sessional	URP 4122: Housing and Community Development Studio	1.5	3
	URP 4132: Rural Planning Studio	1.5	3
	Total Core Sessional	**3.0**	**6.0**
Core Theory	URP 4101: Project Planning and Evaluation Techniques	3	3
	URP 4111: Urban Governance	3	3
	URP 4103: Legal Aspects and Ethics of Planning	3	3
	URP 4161: Disaster Planning and Management	3	3
	Total Core Theory	**12.0**	**12.0**
Elective Theory (Any One)	URP 4113: Development Planning	3	3
	URP 4141: Utility and Municipal Services Planning	3	3
	Total Elective Theory	**3.0**	**3.0**
Thesis	URP 4100: Thesis	**3.0**	**6.0**
Total		**21.0**	**27.0**

L-4, T-2		Credit	Contact Hour/Wk
Core Sessional	URP 4232: Regional Planning Studio	3	6
	URP 4202: Project Planning Studio	1.5	3
	Total Core Sessional	**4.5**	**9.0**
Core Theory	URP 4211: Planning in Globalized World	3	3
	Total Core Theory	**3.0**	**3.0**
Elective Theory (Any Two)	URP 4201: Sustainability and Development	3	3
	URP 4213: Tourism Planning	3	3
	URP 4221: Real Estate Development and Management	3	3
	URP 4261: Smart Cities and Decarbonization	3	3
	URP 4263: Climate Resilient Planning	3	3
	CE 4211: Transportation Engineering for Planners	3	3
	Total Elective Theory	**6.0**	**6.0**
Thesis	URP 4200: Thesis	**3.0**	**6.0**
Total		**16.5**	**24.0**

FACULTY OF BIOMEDICAL AND NUCLEAR ENGINEERING

DEPT OF BIOMEDICAL ENGINEERING

Total Credit Hours: 160.00

Level-1 Term-I

Course Code	Course Name	Contact Hour	Credits
BME 101	Introduction to Biomedical Engineering	2.00	2.00
PHY 125	Waves and Oscillations, Optics and Modern physics	3.00	3.00
GES 101	Fundamentals of Sociology	2.00	2.00
CHEM 103	General Chemistry	3.00	3.00
CHEM 104	Chemistry Sessional	3.00	1.50
MATH 101	Differential and Integral Calculus	3.00	3.00
EECE 191	Principles of Electrical Engineering	3.00	3.00
EECE 192	Principles of Electrical Engineering Sessional	3.00	1.50
Total:		**23.00**	**19.00**

Level-2 Term-I

Course Code	Course Name	Contact Hour	Credits
BME 201	Human Physiology	3.00	3.00
MATH 205	Differential Equation, Laplace transform and Fourier Transform	3.00	3.00
EECE 291	Electronic Circuits and Devices	3.00	3.00
EECE 292	Electronic Circuits and Devices Sessional	3.00	1.50
CSE 291	Computer Programming	3.00	3.00
CSE 292	Computer Programming Sessional	3.00	1.50
GELM 271	Leadership and Management	2.00	2.00
LANG 202/ LANG 204	Communicative English II	3.00	1.50
Total:		**23.00**	**18.50**

Level-1 Term-II

Course Code	Course Name	Contact Hour	Credits
BME 104	CAD in Biomedical Engineering Sessional	3.00	1.50
BME 105	Human Anatomy	3.00	3.00
PHY 127	Structure of matter, Electricity and Magnetism, and Mechanics	3.00	3.00
CHEM 125	Physical and Bio-organic Chemistry	3.00	3.00
MATH 105	Vector Analysis, Matrix and Coordinate Geometry	3.00	3.00
PHY 128	Physics Sessional	3.00	1.50
GEBS 101	Bangladesh Studies	2.00	2.00
LANG 102	Communicative English I	3.00	1.50
Total:		**23.00**	**18.5**

Level-2 Term-II

Course Code	Course Name	Contact Hour	Credits
BME 203	Biochemistry	3.00	3.00
BME 204	Biochemistry Sessional	3.00	1.50
BME 205	Biofluid Mechanics and Heat Transfer	3.00	3.00
BME 206	Biofluid Mechanics and Heat Transfer Sessional	3.00	1.50
BME 207	Biomedical Instrumentation and Measurements	3.00	3.00
BME 208	Biomedical Instrumentation and Measurements Sessional	3.00	1.50
ME 291	Principles of Mechanical Engineering	3.00	3.00
MATH 231	Complex Variables and Linear Algebra	3.00	3.00
Total:		**24.00**	**19.50**

Level-3 Term-I

Course Code	Course Name	Contact Hour	Credits
BME 301	Statistics and Numerical Methods for Engineers	3.00	3.00
BME 302	Statistics and Numerical Methods for Biomedical Engineers Sessional	3.00	1.50
BME 303	Biomechanics	3.00	3.00
BME 304	Biomaterials Sessional	3.00	1.50
BME 305	Biomedical Signal Processing	3.00	3.00
BME 306	Biomedical Signal Processing Sessional	3.00	1.50
BME 307	Medical Imaging	3.00	3.00
EECE 391	Digital Electronics	3.00	3.00
EECE 392	Digital Electronics Sessional	3.00	1.50
Total:		**27.00**	**21.00**

Level-3 Term-II

Course Code	Course Name	Contact Hour	Credits
BME 309	Biomedical Transport Phenomenon	3.00	3.00
BME 311	Embedded Systems and Interfacing	3.00	3.00
BME 312	Embedded Systems and Interfacing Sessional	3.00	1.50
BME 313	Biomedical Image Processing	3.00	3.00
BME 314	Biomedical Image Processing Sessional	3.00	1.50
BME 315	Biomaterials	3.00	3.00
BME 316	Biomaterials Sessional	3.00	1.50
BME 318	Biomedical Engineering Design Sessional I	3.00	1.50
GERM 352	Fundamentals of Research Methodology (Sessional)	4.00	2.00
BME 300	Industrial Training	4 weeks	1.50
Total:		**28.00**	**21.50**

Level-4 Term-1

Course Code	Course Name	Contact Hour	Credit
BME 401	Diagnostic and Therapeutic Equipment-II	3.00	3.00
BME 403	Molecular Biology for Engineers	3.00	3.00
BME 404	Molecular Biology for Engineers Sessional	3.00	1.50
BME 4**	Elective 1	3.00	3.00
BME 4**	Elective 2	3.00	3.00
BME 421	Environment, Sustainability and Law	2.00	2.00
GEPM 481	Project Management and Finance	2.00	2.00
BME 412	Biomedical Engineering Design Sessional II	3.00	1.50
BME 400	Final Year Design and Research Project	6.00	3.00
Total:		**28.00**	**22.00**

Level-4 Term-II

Course Code	Course Name	Contact Hour	Credit
BME 405	Healthcare Technology Management	3.00	3.00
BME 407	Rehabilitation Engineering	3.00	3.00
BME 409	Tissue Engineering	3.00	3.00
BME 4**	Elective 3	3.00	3.00
BME 4**	Elective 4	3.00	3.00
GEEM 451	Engineering Ethics and Moral Philosophy	2.00	2.00
BME 400	Final Year Design and Research Project	6.00	3.00
Total:		**23.00**	**20.50**

DEPT OF NUCLEAR SCIENCE AND ENGINEERING (NSE)

Total Credit Hours: 160.00

Level – 1, Term – I

Course Code	Course Title	Contact Hour	Credit
NE 101	Introduction to Nuclear Engineering	3.0	3.0
PHY 137	Waves and Oscillations, Structure of Matter and Quantum Mechanics	3.0	3.0
MATH 101	Differential and Integral Calculus	3.0	3.0
EECE119	Fundamentals of Electrical Circuit Analysis	3.0	3.0
GES 101	Fundamentals of Sociology	2.0	2.0
Theory Total :		**14.0**	**14.0**
LANG 172	Introduction to Russian Language-I	1.5	0.75
PHY 138	Physics Sessional	3.0	1.5
EECE120	Fundamentals of Electrical Circuit Analysis Sessional	1.5	0.75
ME 180	Basic Engineering Drawing	3.0	1.5
Sessional Total :		**9.0**	**4.50**
Term Total :		**23.0**	**18.50**

Level – 1, Term – II

Course Code	Course Title	Contact Hour	Credit
NE105	Fundamentals of Atomic and Nuclear Physics	3.0	3.0
NE141	Fundamentals of Thermodynamics	3.0	3.0
CHEM101	Fundamentals of Chemistry	3.0	3.0
MATH103	Differential Equations and Matrix	3.0	3.0
CSE121	Introduction to Computer Science and Programming Language	3.0	3.0
GEBS101	Bangladesh Studies and Bengali	2.0	2.0
Theory Total :		**17.0**	**17.0**
LANG 174	Introduction to Russian Language- II	1.5	0.75
CHEM 102	Chemistry Sessional	3	1.5
LANG 102	Communicative English-I	3	1.5
CSE 122	Introduction to Computer Science and Programming Language Sessional	1.5	0.75
Sessional Total :		**9.0**	**4.5**
Term Total :		**26.0**	**21.5**

Level – 2, Term – I

Course Code	Course Title	Contact Hour	Credit
NE 203	Introduction to Nuclear and Radio Chemistry	3.0	3.0
NE 243	Fundamentals of Heat Transfer and Thermal Engineering	4.0	4.0
NE 251	Nuclear Materials	3.0	3.0
MATH 201	Vector Analysis, Laplace Transform and Coordinate Geometry	3.0	3.0
GELM 275	Leadership and Management	2.0	2.0
Theory Total :		**15.0**	**15.0**
NE 204	Introduction to Nuclear and Radio Chemistry Sessional	1.5	0.75
NE 244	Fundamentals of Heat Transfer and Thermal Engineering Sessional	3.0	1.5
NE 252	Nuclear Materials Sessional	3.0	1.5
LANG 202	Communicative English-II	3.0	1.5
Sessional Total :		**10.5**	**5.25**
Term Total :		**25.5**	**20.25**

Level – 2, Term – II

Course Code	Course Title	Contact Hour	Credits
NE 207	Reactor Theory and Analysis-I	3.00	3.00
NE 261	Numerical Methods in Nuclear Engineering Analysis	3.00	3.00
EECE 221	Electrical and Electronics Technology	3.00	3.00
ME 253	Engineering Mechanics	3.00	3.00
MATH 209	Fourier Analysis, Complex Variable and Statistics	3.00	3.00
GESL 221	Environment, Sustainability and Law	2.00	2.00
Theory Total:		**17.0**	**17.0**
NE 262	Numerical Methods in Nuclear Engineering Analysis Sessional	3.00	1.50
EECE 222	Electrical and Electronics Technology Sessional	3.00	1.50
ME 254	Engineering Mechanics Sessional	1.50	0.75
Sessional Total:		**7.50**	**3.75**
Term Total:		**24.50**	**20.75**

Level – 3, Term – I

Course Code	Course Title	Contact Hour	Credit
NE 301	Radiation Detection and Measurement	3.00	3.00
NE 355	Fluid Mechanics and Machinery	3.00	3.00
NE 307	Reactor Theory and Analysis - II	3.00	3.00
NE 317	Nuclear Security and Safeguard Engineering	3.00	3.00
NE 331	Automation and Control System	3.00	3.00
GEPM 381	Project Management and Finance	2.00	2.00
Theory Total :		**17.00**	**17.00**
NE 302	Radiation Detection and Measurement Sessional	1.5	0.75
NE 318	Nuclear Security and Safe guard Engineering Sessional	1.5	0.75
NE 356	Fluid Mechanics and Machinery Sessional	1.5	0.75
Sessional Total :		**4.5**	**2.25**
Term Total :		**21.5**	**19.25**

Level – 3, Term – II

Course Code	Course Title	Contact Hour	Credit
NE 305	Nuclear Reactor Thermal Hydraulics	3.0	3.0
NE 321	Reactor Operation and Safety	3.0	3.0
NE 333	Reactor Instrumentation and Control	3.0	3.0
NE 353	Mechanics of Materials	3.0	3.0
GEEM 351	Engineering Ethics & Moral Philosophy	2.0	2.0
Theory Total :		**14.0**	**14.0**
NE 306	Nuclear Reactor Thermal Hydraulics Sessional	3	1.5
NE 320	Industrial Training	4 Wks	1.5
NE 334	Reactor Instrumentation and Control Sessional	1.5	0.75
NE 354	Mechanics of Materials Sessional	1.5	0.75
GERM 352	Fundamentals of Research Methodology	4.0	2.0
Sessional Total :		**10+ 4Wks**	**6.5**
Term Total :		**24 + 4 Wks**	**20.5**

Level – 4, Term – I

Course Code	Course Title	Contact Hour	Credit
NE 409	Nuclear Fuel Cycle and Radioactive Waste Management	3.00	3.00
NE 417	Nuclear Accidents Analysis and Radiological Emergency	3.00	3.00
NE 425	Nuclear Reactor Design and Features	3.00	3.00
-	Elective Course-1	3.00	3.00
-	Elective Course-2	3.00	3.00
Theory Total:		**15.00**	**15.00**
NE 400	Final Year Design and Research Project	6.00	3.00
NE 410	Nuclear Fuel Cycle and Radioactive Waste Management Sessional	2.00	1.00
NE 426	Nuclear Reactor Design and Features Sessional	3.00	1.50
Sessional Total:		**11.00**	**5.50**
Term Total:		**26.0**	**20.50**

Level – 4, Term – II

Course Code	Course Title	Contact Hour	Credits
NE 415	Radiation Interactions, Shielding and Protection	2.00	2.00
NE 423	Nuclear Power Plant Operation and In-core Fuel Management	3.00	3.00
NE 427	Nuclear Power Plant Engineering	3.00	3.00
-	Elective Course-3	3.00	3.00
-	Elective Course-4	3.00	3.00
Theory Total:		**14.00**	**14.00**
NE 400	Final Year Design and Research Project	6.00	3.00
NE 424	In-core Fuel Management Sessional	2.00	1.00
NE 428	Nuclear Power Plant Engineering Sessional	1.50	0.75
Sessional Total:		**9.50**	**4.75**
Term Total:		**23.5**	**18.75**

DEPT OF MATHEMATICS
MATHEMATICS & DATA SCIENCE

Total Credit Hours: 140.00

LEVEL-1, TERM-I

Course No.	Course Name	Credit Hour	Contact Hour
MATH101	Fundamentals of Mathematics	3.00	3.00
MATH102	Differential Calculus	3.00	3.00
MATH103	Analytic Geometry and Vector Analysis	3.00	3.00
STAT 101	Basic Statistics and Probability	3.00	3.00
PHY 101	Physics-I	2.00	2.00
ENG 111	English for Communication and Scientific Writing	1.50	3.00
MATH 150	Math Lab I: MATHEMATICA	0.75	1.50
MATH 151	Math Lab II: MS Excel	0.75	1.50
Total		**17.00**	**20.00**

Level-1, Term-II

Course No.	Course Name	Credit Hour	Contact Hour
MATH104	Linear Algebra	3.00	3.00
MATH105	Integral Calculus	3.00	3.00
MATH106	Introduction to Number Theory	3.00	3.00
DS 101	Introduction to Data Science	2.00	2.00
DS 102	Python and R for Data Science	2.00	2.00
GEESP 101	General Education	2.00	2.00
MATH 152	Math Lab III: Python for Data Science	0.75	1.50
MATH 153	Math Lab IV: Python and R for Data Science	0.75	1.50
MATH199	Presentation on Modern Trends in Mathematics and Data Science	1.00	1.00
Total		**17.50**	**19.00**

Level-2, Term-I

Course No.	Course Name	Credit Hour	Contact Hour
MATH201	Differential Equations	3.00	3.00
MATH202	Numerical Analysis I	3.00	3.00
STAT 201	Mathematical Statistics	3.00	3.00
DS 201	Introduction to Machine Learning	3.00	3.00
PHY 201	Physics-II	2.00	2.00
ECO 201	Mathematical Economics	2.00	2.00
MATH250	MathLabV(MATLAB: Numerical Analysis)	1.50	3.00
Total		**17.50**	**19.00**

Level-2, Term-II

Course No.	CourseName	Credit Hour	Contact Hour
MATH203	Real Analysis	3.00	3.00
MATH204	Discrete Mathematics	3.00	3.00
MATH205	Multivariate Calculus	3.00	3.00
DS 202	Data Base Management System	3.00	3.00
DS 203	Introduction to Data Mining and Data Visualization	2.00	2.00
GERM 201	Research Methodology	2.00	2.00
MATH251	Math Lab VI (Data Mining and Data Visualization, SQL)	1.50	3.00
MATH299	Presentation on Modern Trends in Mathematics and Data Science	1.00	1.00
Total		**18.50**	**20.00**

Level-3, Term-I

Course No.	Course Name	Credit Hour	Contact Hour
MATH301	Complex Analysis	3.00	3.00
MATH302	Fundamentals of Topology	3.00	3.00
MATH303	Mathematical Methods	3.00	3.00
MATH304	Stochastic Calculus	3.00	3.00
DS 301	Deep Learning and Neural Networks	3.00	3.00
MATH350	Math Lab VII (C^{++})	1.50	3.00
Total		**16.50**	**18.00**

Level-3, Term-II

CourseNo.	CourseName	Credit Hour	Contact Hour
MATH305	Abstract Algebra	3.00	3.00
MATH306	Numerical Analysis II	2.00	2.00
B MATH 301	Introduction to Mathematical Finance	3.00	3.00
DS 302	Data Structures and Algorithms	3.00	3.00
DS 303	Data Security	2.00	2.00
GELM 301	Leadership Management	2.00	2.00
MATH350	Math Lab VIII (MATLAB/PYTHON: Numerical Analysis)	1.50	3.00
MATH399	Presentation on Modern Trends in Mathematics and Data Science	1.00	1.00
Total		**17.50**	**19.00**

Level-4, Term-I

Course No.	CourseName	Credit Hour	Contact Hour
MATH401	Introduction to Functional Analysis	3.00	3.00
MATH402	Industrial Mathematics	3.00	3.00
MATH403	Mechanics	3.00	3.00
MATH404	Optimization Techniques	3.00	3.00
MATH 405	Introduction to Actuarial Mathematics	3.00	3.00
MATH 406	Combinatorics	3.00	3.00
MATH 407	Meteorology	3.00	3.00
Courses MATH 401–MTH 407 to be offered by the Academic Committee (Four courses has to be taken: 12 Credits)			
DS 401	Big Data Analytics	3.00	3.00
GESE	Data privacy and Ethics	2.00	2.00
MATH450	Math Lab IX (Stata / Ansyis)	1.50	3.00
Total		**18.50**	**20.00**

Level-4, Term-II

CourseNo.	CourseName	Credit Hour	Contact Hour
MATH408	Differential Geometry and Tensor Calculus	3.00	3.00
MATH409	Hydrodynamics and Fluid Dynamics	3.00	3.00
MATH4010	Scientific Computing and simulations	3.00	3.00
MATH 411	Mathematical Biology	3.00	3.00
MATH 412	Fuzzy Mathematics	3.00	3.00
Courses MATH 408–MTH 412 to be offered by the Academic Committee (Two courses has to be taken: 06 Credits)			
DS 403	Multivariate Analysis	2.00	2.00
DS 404	Time Series Analysis and Forecasting	2.00	2.00
MATH 451	Math Lab X (Application of Multivariate Analysis)	1.50	3.00
MATH452	Math Lab XI (Application of Time Series Analysis and Forecasting)	1.50	3.00
MATH490	Project Work/ Thesis	3.00	3.00
MATH499	Presentation on Modern Trends in Mathematics and Data Science	1.00	1.00
Total		**17.00**	**20.00**

DEPT OF CHEMISTRY

CHEMISTRY AND NANOSCIENCE

Total Credit Hours: 140.00

Level 1 Term I

Ser	Course Code	Course Title	Cr Hr	Contact Hr
1.	0531 CHN 101	Introduction to Physical Chemistry	3.0	3.0
2.	0531 CHN 121	Organic Chemistry I	3.0	3.0
3.	0531 CHN 161	Fundamentals of Analytical Chemistry	2.0	2.0
4.	0541 MATH 101	Differential and Integral Calculus	3.0	3.0
5.	0223 GEESP 101	Ethics and Social Philosophy	2.0	2.0
Subtotal Theory			**13.0**	**13.0**
6.	0541 CHN 122	Organic Chemistry Sessional I	1.5	3.0
7.	0231 LANG 102	Communicative English Sessional	1.5	3.0
Subtotal Sessional			**3.0**	**6.0**
Total			**16.0**	**19.0**

Level 1 Term II

Ser	Course Code	Course Title	Cr Hr	Contact Hr
1.	0531 CHN 141	Principles of Inorganic Chemistry	3.0	3.0
2.	0531 CHN 143	Chemistry of Representative Elements	3.0	3.0
3.	0541 MATH 103	Vector Analysis and Linear Algebra	3.0	3.0
4.	0613 CSE 101	Structured Programming Language	3.0	3.0
Subtotal Theory			**12.0**	**12.0**
5.	0541 CHN 142	Inorganic Chemistry Sessional I	3.0	6.0
6.	0613 CSE 102	Structured Programming Sessional	1.5	3.0
7.	0541 CHN 190	Presentation on Modern Trends in Chemistry and Nanoscience-I	1.0	2.0
Subtotal Sessional			**5.5**	**11.0**
Total			**17.5**	**23.0**
Total Credit Hr Completion at Level 1			**33.5**	**42.0**

Level 2 Term I

Ser	Course Code	Course Title	Cr Hr	Contact Hr
1.	0531 CHN 201	Electrochemistry	3.0	3.0
2.	0531 CHN 203	Surface Chemistry, Colloid Science and Phase Equilibria	2.0	2.0
3.	0531 CHN 241	Transition Metal and Coordination Chemistry	3.0	3.0
4.	0541 MATH 201	Differential Equations and Fourier Transform	3.0	3.0
5.	0533 PHY 201	Mechanics, Waves and Optics	3.0	3.0
Subtotal Theory			**14.0**	**14.0**
6.	0531 CHN 242	Inorganic Chemistry Sessional II	3.0	6.0
Subtotal Sessional			**3.0**	**6.0**
Total			**17.0**	**20.0**

Level 2 Term II

Ser	Course Code	Course Title	Cr Hr	Contact Hr
1.	0531 CHN 205	Chemical Thermodynamics	3.0	3.0
2.	0531 CHN 221	Organic Chemistry II	3.0	3.0
3.	0531 CHN 223	Stereochemistry of Organic Compounds	2.0	2.0
4.	0531 CHN 281	Fundamentals of Nanoscience	3.0	3.0
5.	0533 PHY 203	Electricity and Magnetism	3.0	3.0
Subtotal Theory			**14.0**	**14.0**
6.	0531 CHN 202	Physical Chemistry Sessional I	1.5	3.0
7.	0533 PHY 202	Physics Sessional	1.5	3.0
8.	0531 CHN 290	Presentation on Modern Trends in Chemistry and Nanoscience-II	1.0	2.0
Subtotal Sessional			**4.0**	**8.0**
Total			**18**	**22.0**
		Total Credit Hr Completion at Level 2	**35.0**	**42.0**

Level 3 Term I

Ser	Course Code	Course Title	Cr Hr	Contact Hr
1.	0531 CHN 301	Chemical Kinetics and Photochemistry	3.0	3.0
2.	0531 CHN 321	Organic Reaction Mechanism	3.0	3.0
3.	0531 CHN 361	Instrumental Methods of Analysis in Chemistry and Nanoscience	3.0	3.0
4.	0531 CHN 363	Inorganic Chemical Process Industries	2.0	2.0
5.	0531 CHN 371	Chemical Spectroscopy I	3.0	3.0
Subtotal Theory			**14.0**	**14.0**
6.	0531 CHN 302	Physical Chemistry Sessional II	3.0	6.0
Subtotal Sessional			**3.0**	**6.0**
Total			**17.0**	**20**

Level 3 Term II

Ser	Course Code	Course Title	Cr Hr	
1.	0531 CHN 323	Bioorganic Chemistry	2.0	2.0
2.	0531 CHN 341	Crystallography and Solid State Chemistry	3.0	3.0
3.	0531 CHN 365	Organic Chemical Process Industries	2.0	2.0
4.	0531 CHN 373	Chemical Spectroscopy II	3.0	3.0
5.	0531 CHN 375	Quantum Chemistry and Statistical Mechanics	2.0	2.0
6.	0531 CHN 383	Nanoscale Synthesis, Fabrication and Characterization	3.0	3.0
Subtotal Theory			**15**	**15**
7.	0531 CHN 342	Organic Chemistry Sessional II	3.0	6.0
8.	0531 CHN 390	Presentation on Modern Trends in Chemistry and Nanoscience-III	1.0	2.0
9.	0531 CHN 393	Industrial Training/Factory Visit	1.5	3.0
Subtotal Sessional			**5.5**	**11**
Total			**20.5**	**26**
		Total Credit Hr Completion at Level 3	**37.5**	**46.0**

Level 4 Term I

Ser	Course Code	Course Title	Cr Hr	Contact Hr
1.	0531 CHN 401	Polymer and Supramolecular Chemistry	3.0	3.0
2.	0531 CHN 421	Chemistry of Natural Products	2.0	2.0
3.	0531 CHN 441	Nuclear Chemistry	2.0	2.0
4.	0531 CHN 485	Applications of Nanoscale Materials	3.0	3.0
5.	0531 GESHC 401	Chemical Security, Hazard Mitigation, and Chemical Weapon Regulations	2.0	2.0
Subtotal Theory			**12.0**	**12.0**
6.	0531 GERM 401	Research Methodology	1.0	2.0
7.	0531 CHN 482	Nanomaterials Synthesis Sessional	1.5	3.0
8.	0531 NSE 442	Nuclear Chemistry Sessional	1.5	3.0
Subtotal Sessional			4.0	8.0
Total			**16.0**	**20.0**

Level 4 Term II

Ser	Course Code	Course Title	Cr Hr	Contact Hr
1.	0531 CHN 443	Advanced Topics in Inorganic Chemistry	2.0	2.0
2.	0531 CHN 445	Green Chemistry for Sustainable Environment	2.0	2.0
3.	0531 CHN 451 0531 CHN 453 0531 CHN 455 0531 CHN 457 0531 CHN 459	Elective** (any one Course) • Applied Physical Chemistry • Medicinal Chemistry • Bioinorganic Chemistry • Nanotechnology for Energy Conversion and Storage • Nanophotonics and Magnetic Nanostructures	2.0	2.0
4.	0512 BME 487	Chemistry of Nano-Biomolecules	3.0	3.0
5.	0413 GELM 475	Leadership and Management	2.0	2.0
Total Theory			**11.0**	**11.0**
6.	0531 CHN 444	Advanced Inorganic and Analytical Chemistry Sessional	1.5	3.0
7.	0531 CHN 484	Computational Methods in Chemistry and Nanoscience	1.5	3.0
8.	0531 CHN 490	Presentation on Modern Trends in Chemistry and Nanoscience-IV	1.0	2.0
9.	0531 CHN 493	Project/Thesis	3.0	6.0
Total Sessional			**7.0**	**14.0**
Total			**18**	**25.0**
Total Credit Hr Completion at Level 4			**34.0**	**45.0**
Total Credit Earned (Theory :105, Sessional:35)			**140**	**175**

DEPT OF SCIENCE AND HUMANITIES

Total Credit Hours: 160.00

Level-1 Term-I

Course Code	Course Name	Contact Hour	Credits
BME 101	Introduction to Biomedical Engineering	2.00	2.00
PHY 125	Waves and Oscillations, Optics and Modern physics	3.00	3.00
GES 101	Fundamentals of Sociology	2.00	2.00
CHEM 103	General Chemistry	3.00	3.00
CHEM 104	Chemistry Sessional	3.00	1.50
MATH 101	Differential and Integral Calculus	3.00	3.00
EECE 191	Principles of Electrical Engineering	3.00	3.00
EECE 192	Principles of Electrical Engineering Sessional	3.00	1.50
Total:		**23.00**	**19.00**

Level-1 Term-II

Course Code	Course Name	Contact Hour	Credits
BME 104	CAD in Biomedical Engineering Sessional	3.00	1.50
BME 105	Human Anatomy	3.00	3.00
PHY 127	Structure of matter, Electricity and Magnetism, and Mechanics	3.00	3.00
CHEM 125	Physical and Bio-organic Chemistry	3.00	3.00
MATH 105	Vector Analysis, Matrix and Coordinate Geometry	3.00	3.00
PHY 128	Physics Sessional	3.00	1.50
GEBS 101	Bangladesh Studies	2.00	2.00
LANG 102	Communicative English I	3.00	1.50
Total:		**23.00**	**18.5**

Level-2 Term-I

Course Code	Course Name	Contact Hour	Credits
BME 201	Human Physiology	3.00	3.00
MATH 205	Differential Equation, Laplace transform and Fourier Transform	3.00	3.00
EECE 291	Electronic Circuits and Devices	3.00	3.00
EECE 292	Electronic Circuits and Devices Sessional	3.00	1.50
CSE 291	Computer Programming	3.00	3.00
CSE 292	Computer Programming Sessional	3.00	1.50
GELM 271	Leadership and Management	2.00	2.00
LANG 202/ LANG 204	Communicative English II	3.00	1.50
Total:		**23.00**	**18.50**

Level-2 Term-II

Course Code	Course Name	Contact Hour	Credits
BME 203	Biochemistry	3.00	3.00
BME 204	Biochemistry Sessional	3.00	1.50
BME 205	Biofluid Mechanics and Heat Transfer	3.00	3.00
BME 206	Biofluid Mechanics and Heat Transfer Sessional	3.00	1.50
BME 207	Biomedical Instrumentation and Measurements	3.00	3.00
BME 208	Biomedical Instrumentation and Measurements Sessional	3.00	1.50
ME 291	Principles of Mechanical Engineering	3.00	3.00
MATH 231	Complex Variables and Linear Algebra	3.00	3.00
Total:		**24.00**	**19.50**

Level-3 Term-I

Course Code	Course Name	Contact Hour	Credits
BME 301	Statistics and Numerical Methods for Engineers	3.00	3.00
BME 302	Statistics and Numerical Methods for Biomedical Engineers Sessional	3.00	1.50
BME 303	Biomechanics	3.00	3.00
BME 304	Biomaterials Sessional	3.00	1.50
BME 305	Biomedical Signal Processing	3.00	3.00
BME 306	Biomedical Signal Processing Sessional	3.00	1.50
BME 307	Medical Imaging	3.00	3.00
EECE 391	Digital Electronics	3.00	3.00
EECE 392	Digital Electronics Sessional	3.00	1.50
Total:		**27.00**	**21.00**

Level-3 Term-II

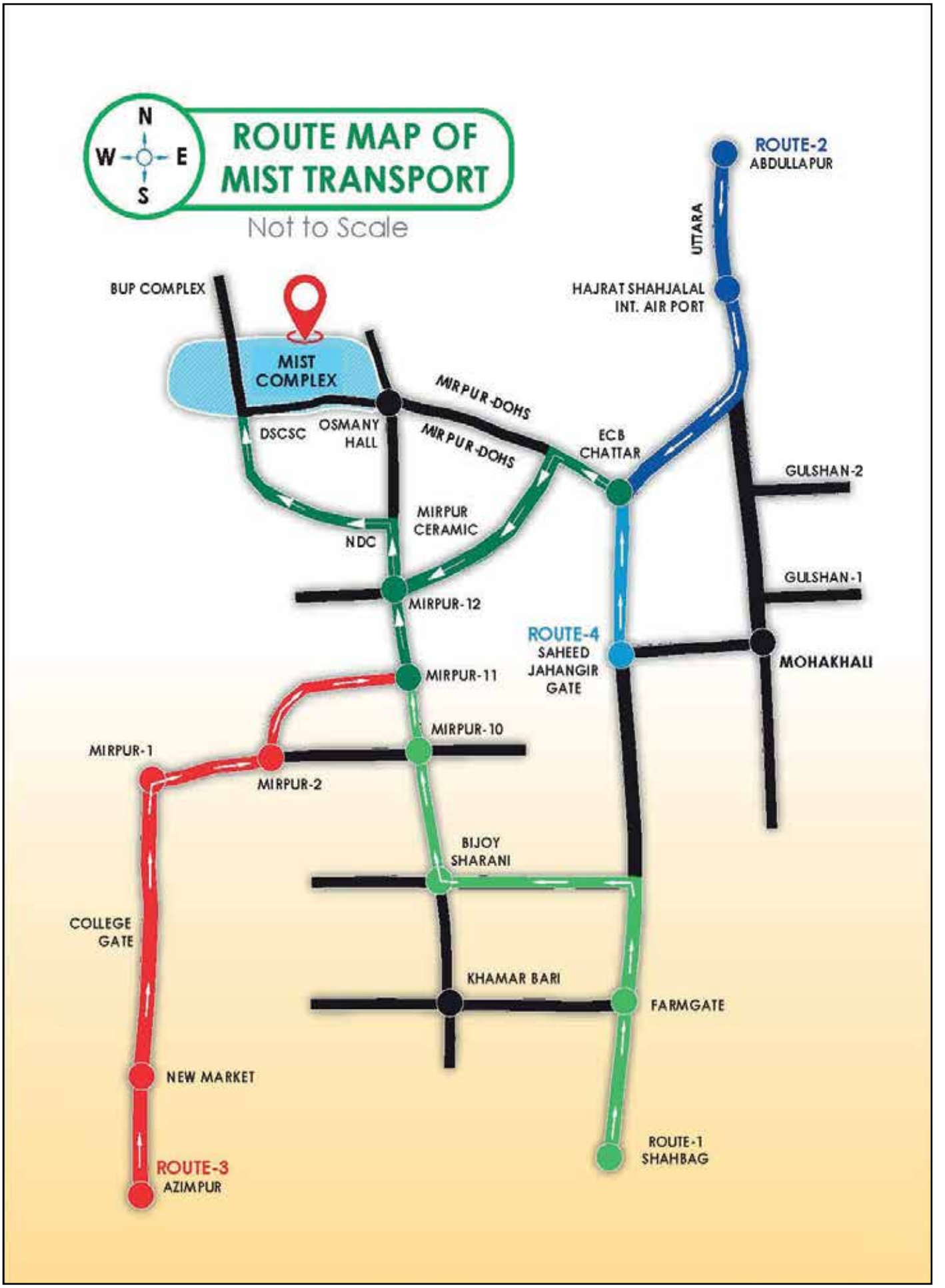
Course Code	Course Name	Contact Hour	Credits
BME 309	Biomedical Transport Phenomenon	3.00	3.00
BME 311	Embedded Systems and Interfacing	3.00	3.00
BME 312	Embedded Systems and Interfacing Sessional	3.00	1.50
BME 313	Biomedical Image Processing	3.00	3.00
BME 314	Biomedical Image Processing Sessional	3.00	1.50
BME 315	Biomaterials	3.00	3.00
BME 316	Biomaterials Sessional	3.00	1.50
BME 318	Biomedical Engineering Design Sessional I	3.00	1.50
GERM 352	Fundamentals of Research Methodology (Sessional)	4.00	2.00
BME 300	Industrial Training	4 weeks	1.50
Total:		**28.00**	**21.50**

Level-4 Term-1

Course Code	Course Name	Contact Hour	Credit
BME 401	Diagnostic and Therapeutic Equipment-II	3.00	3.00
BME 403	Molecular Biology for Engineers	3.00	3.00
BME 404	Molecular Biology for Engineers Sessional	3.00	1.50
BME 4**	Elective 1	3.00	3.00
BME 4**	Elective 2	3.00	3.00
BME 421	Environment, Sustainability and Law	2.00	2.00
GEPM 481	Project Management and Finance	2.00	2.00
BME 412	Biomedical Engineering Design Sessional II	3.00	1.50
BME 400	Final Year Design and Research Project	6.00	3.00
Total:		**28.00**	**22.00**

Level-4 Term-II

Course Code	Course Name	Contact Hour	Credit
BME 405	Healthcare Technology Management	3.00	3.00
BME 407	Rehabilitation Engineering	3.00	3.00
BME 409	Tissue Engineering	3.00	3.00
BME 4**	Elective 3	3.00	3.00
BME 4**	Elective 4	3.00	3.00
GEEM 451	Engineering Ethics and Moral Philosophy	2.00	2.00
BME 400	Final Year Design and Research Project	6.00	3.00
Total:		**23.00**	**20.50**


N
W
E
S
ROUTE MAP OF MIST TRANSPORT
Not to Scale
ROUTE-2
ABDULLAPUR
UTTARA
HAJRAT SHAHJALAL INT. AIR PORT
BUP COMPLEX
MIST COMPLEX
MIRPUR-DOHS
DSCSC
OSMANY HALL
MIRPUR-DOHS
ECB CHATTAR
GULSHAN-2
MIRPUR CERAMIC
NDC
GULSHAN-1
MIRPUR-12
ROUTE-4
SAHEED JAHANGIR GATE
MOHAKHALI
MIRPUR-11
MIRPUR-10
MIRPUR-1
MIRPUR-2
BIJOY SHARANI
COLLEGE GATE
KHAMAR BARI
FARMGATE
NEW MARKET
ROUTE-1
SHAHBAG
ROUTE-3
AZIMPUR

Published by : Research and Development Wing, MIST
Address : Mirpur Cantonment, Dhaka-1216
Web Site : www.mist.ac.bd
e-mail : info@mist.ac.bd

Important Contact Numbers
Admission Officer:
Mobile: 01769024054, 01769024056
Telephone: 8035419
Military Phone: 803111 Ext-3842
Fax: 88-02-9011311