ABOUT MIST

Military Institute of Science and Technology (MIST), the pioneer technical institute of armed forces, started its journey from 19 April 1998. The honourable Prime Minister, People's Republic of Bangladesh, Sheikh Hasina unveiled the foundation plaque. First academic program was launched on 31 January 1999 with the maiden batch of Civil Engineering (CE). The pioneer batch comprised of only military students. Civil students (both male and female) were admitted to various disciplines in the session 2002-2003. 12th batch of CE students have already graduated on 18th Mar 2014. These graduates are proving their worth in higher studies and professional assignments both in home and abroad.

Foreign students were admitted first time in session 2008-2009. MIST envisages creating facilities for military as well as civil students from home and abroad dedicated to pursue standard curriculum leading to graduation and post-graduation degrees. As an institution MIST is already on steady stride upholding its motto **'Technology for Advancement'**. The institute remains committed to contribute to the wider spectrum of national educational arena and plays a significant role in the development of human resources.

ATTRIBUTES OF MIST

- Rigorous admission and selection process for best possible screening.
- Interactive sessions in the classroom.
- Regular guest lectures and educational visits.
- Culture of timeliness, commitment and uninterrupted curriculum.
- Flexibility in choosing competent faculties through outsourcing.
- Well thought-out and continuous feedback and assessment system.
- Effective teaching through innovative method.
- Industrial attachment for on job training.
- Emphasis on code of conduct and dress code.
- Focus to develop students as good human with all possible attributes of 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 officials/ students of home and abroad at degree and post graduate levels.

- To organise courses on military science, technology and management in various arenas of interest.

- To hold examinations and confer certificates of diplomas/degrees, other academic distinctions, to and on persons who have persuaded a course of study and have passed examinations conducted by the institute.

- To confer research degrees, award fellowship, scholarship, exhibition, prizes, medals and honorary degrees to persons who have carried out research works under conditions as prescribed in the MIST regulations.

- To establish Teaching Divisions (Div), Departments (Department), Centers, Faculties etc and to make necessary arrangements for their maintenance/management/administration.

- To make provisions for advisory, research and consultation service including supervision, material testing and to enter into suitable agreement with any persons/organizations for these purpose.

- To co-operate with Universities/ Technical Institutions (both military and civil) including memoranda 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)
- To conduct post graduate/ masters and PhD program.
- To conduct diploma courses in surveying & mapping.
- To conduct diploma and certificate courses in CSE.
- To conduct professional advanced courses.

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.

DEPARTMENTS

Presently MIST has six departments to conduct six different engineering disciplines. Four new departments will commence their curriculum from 2015. The departments impart education basing on common objectives and outcomes set by MIST and have defined program objectives and outcomes, specific to the departments respectively.

Civil Engineering (CE) Department

Focussing on creating a positive, interactive learning environment, the department of CE produces top-notch engineers and leaders for the next generation. The department started its journey as pioneer department with 40 military students in 1999. After 14 years of its inception, the department has again pioneered in introducing Post Graduate Degree in CE since October semester 2012. At present 33 faculties are serving in this department of whom 9 are PhD qualified. It is now providing the most sophisticated and updated technological support in the field of civil engineering. In addition, the program's emphasis on engineering sciences and design; provides students with ample opportunity to put their knowledge into practice by solving real-world problems under the guidance of our readily approachable faculty members. This department is enriched with highly experienced and disciplined teaching staffs having wide vision. The department plays a very important role in the country's infrastructural development. Many important construction works and projects in the field of structural, geotechnical, transportation and environmental engineering are carried out with the consultancy services of this department. A study on circular waterway around the Dhaka city, Master plan of Mirpur cantonment, Eco-park in Mirpur cantonment area, Garment buildings inspection and assessment of different military installation was carried by the faculty members of this department. Various tests regarding material properties, constructional quality controls etc. are also on-going in the laboratories.

Computer Science and Engineering (CSE) Department

Department of CSE has started its journey from academic session 2000-2001. The department is currently offering undergraduate program B.Sc. in CSE. With its excellent professional competence, pragmatic curriculum, expert teaching viewpoints and capabilities of training, B.Sc. in CSE degree program has achieved accreditation from BAETE (IEB) on 10 July 2013 with a grade as "Good". This department produces highly qualified and skilled computer graduates. Over the years, this rapidly flourishing department has been providing the technical foundation, scholarly guidance and leadership skills to the undergraduate students who proved their potentiality at home and abroad. Major areas of specialties of CSE department are Hardware, Networking, Software, Computer Graphics & Image Processing, Artificial Intelligence & Robotics and System Analysis Design & Development. At present 28 faculties specialized from different background (civil, military and foreign) are serving in this department. The department has already started M.Sc. in CSE.

Electrical, Electronic and Communication Engineering (EECE) Department

EECE Department started its journey in 2003. The department is currently offering undergraduate program B.Sc. in EECE. The EECE department mainly focused on three major areas: power, electronics and communication in the graduate and undergraduate curricula. The expertise of the faculty members of this department ranges from communication, power systems to VLSI technology. The research areas of faculties of this department include satellite navigation, radar detection and tracking, optical fiber communication, broadband wireless communications, renewable energy, thin-film technology, power system, electrical machines, solid state device, signal processing, image processing, device modeling, power electronics, control engineering, high voltage engineering, etc. The department got accreditation from BAETE in September 2010. At present 19 faculties are serving in this department. The department started its Post Graduate Program since Oct 2013.

Mechanical Engineering (ME) Department

The ME department started its journey from January 2003. The aim of the department is to provide mechanical engineering with high-quality engineering education and contribute new knowledge through research in mechanical engineering and allied disciplines. Mechanical Engineers apply the principles of mechanics and energy to the design of machines and devices. They must be able to control mechanical systems and usually work with other professionals in designing these systems. Automobiles, engines, heating and air-conditioning system, gas and steam turbines, air and space vehicles, trains, ships, servomechanisms, transmission mechanisms, machine tools, material handling systems, elevators and escalators, and robots used in industry are a few of the systems and devices requiring mechanical engineering knowledge.

The ME department offers dynamic educational programs. The faculty also delivers quality engineering education. The department offers studies leading to the B. Sc. in ME, M. Sc. in ME and the Ph.D. This department has received accreditation from BAETE, IEB on March 2010 with a grade as 'GOOD'.

Aeronautical Engineering (AE) Department

AE department started its journey from 1st February 2009. The department is currently offering B.Sc in AE undergraduate program. The AE undergraduate program provides an excellent technical background for persons who want to work in the field of aviation. The new generation of Aeronautical Engineers are encouraged to undertake research and development activities in the areas of aerodynamics, aerospace propulsion, aircraft loading & structural analysis, aerospace vehicle design, space technology, advance aerospace technology, avionics and analysis of fundamentals as well as applied problems. The department is organized into two major divisions: Aerospace and Avionics. At present overseas students from Palestine and Nepal are studying in this department. 17 faculties specialized from different background (civil, military and foreign) are serving in this department.

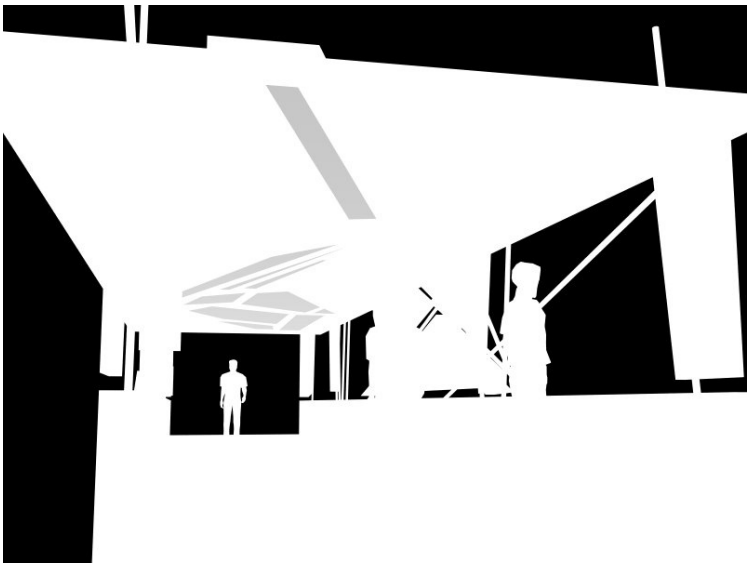
Within only six years, the department has participated in many national and international competitions and have clinched praise-worthy results. Mentionable are NASA Lunabotics mining Competition, 2013(USA) , SAE Aero-design competition (USA) . The department is in the process of concluding MOU with Civil Aviation Authority of Bangladesh (CAAB), Bangladesh Biman, Bangladesh University of Engineering & Technology (BUET), Dhaka University (DU), Beijing University of Aeronautics and Astronautics (China) and other universities/organizations at home and abroad for the improvement of its academic capabilities.

Naval Architecture and Marine Engineering (NAME) Department

The department of NAME started its journey with undergraduate program from 27 January 2013 consisting of 30 students. The department is organized into two major divisions: Naval Architecture and Marine Engineering. Naval architecture speaks about design of ships & offshore structures, determine the optimum/efficient shape for the hull/structure, supervision of construction work etc. Marine engineering is related with design, operation & maintenance of propulsion system & machinery of ships. The industry positions where the students may be employed include ship design firms, dockyards, shipyards, shipping companies, classification societies, Ministry of Shipping, BIWTA and BIWTC. At present 07 faculties, specialized from different background (Military & Civil) are serving in this department. NAME department have plan to start M. Sc. Program from 2017.

Department of Architecture

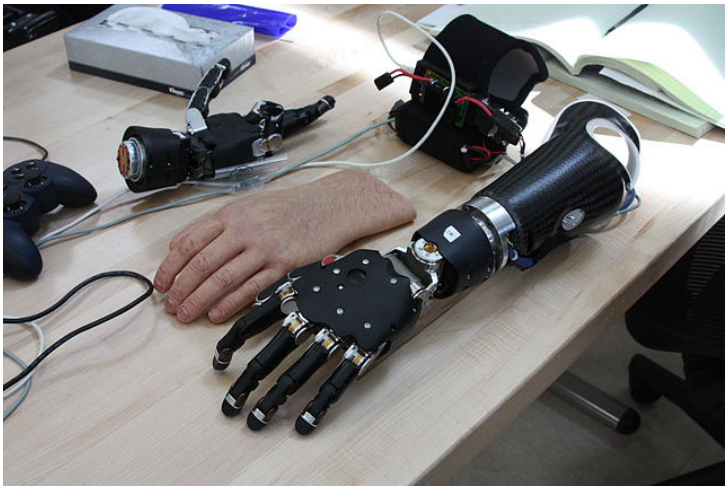
Architecture evolved from the basic need to create shelter. The beginnings are rooted in desire primal need to define space and an envelope for his daily activities. As the act of living gained complexity, so did the awareness for space definition. This basic requirement acquired many adjuncts and revealed itself in terms of social, political, religious, cultural and other needs. Architecture became manifest in a multitude of endeavors in the political, social, religious and economic spheres-transcending the simple scope of defining as shelter. Aside from geographical positioning-political, cultural, economic and technological environments have shaped and generated architectural norms that define the characteristic of a place. And, in that manner, the architecture of a place eventually becomes the symbol and marker for its society. In Bangladesh, as elsewhere in the world, architectural norms have evolved from a similar pattern of an awakened conscious and aesthetic. Architecture bears the stamp of the physical environment and the people that have begotten it and in the process certain styles are established. In this region, architectural styles have developed in the same manner and have been influenced and generated largely by climatic, historical, technological, economic and political considerations.



Environmental, Water Resources and Coastal Engineering (EWCE) Department

In line with the ongoing expansion policy of MIST, EWCE department is a newly introduce degree awarding department which will be commenced from January 2015 session. The department will first initiate undergraduate degree program and subsequently will go for further enlarging its arena. Concern over environment is a global issue and environmental issues related to large scale civil engineering projects need further special attention in order to minimize the adverse impact over surrounding environment. For Bangladesh managing the vast water resources for its optimum benefit is very vital for overall livelihood of the people. The long stretched coastal zones also offer excellent opportunities to rift the maximum output. More so, the unique and dynamic nature of the coastal belt needs special study and extensive research for sustaining any future project along the coastal line. Combining all mentioned above, an all-embracing study and research work on water resources, costal zones and its relevancy on the overall environment is a call for time. Realizing these importance and with a view to contribute in uplifting the socio-economic condition of the country MIST took the bold step to producing experts on these very specialized fields. It is expected that relevant and all-encompassing studies and researches by this newly introduced department will reduce much of the existing 'knowledge and understanding gap' in those fields.

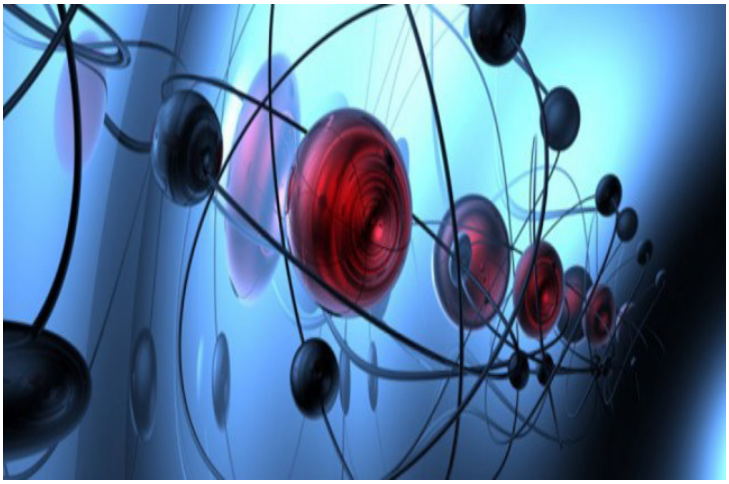
Biomedical Engineering (BME) Department



BME aims to improve human health by applying engineering principles and methods to medical problems. Although Biomedical Engineering is very a recent subject being introduced in our country, it is already a very demanding field of study and students get versatile means for career development after completing the degree. Today biomedical engineers are employed in industry, in hospitals, in research facilities, in government regulatory agencies etc. BME is a broad, interdisciplinary field that applies the art of engineering principles and design concepts to problems in biology, medicine, and biotechnology for healthcare purposes e.g diagnostic or therapeutic. The field seeks to close the gap between engineering and medicine. All the life saving devices like cardiac pacemakers, defibrillators, artificial kidneys, blood oxygenators, prosthetic hearts, and joints etc. along with the commonly known medical equipments as CAT, PET, MRI, functional NMR, potential mapping, CT scan, X-ray machine etc. all are the outcome of BME.

The undergraduate program in BME provides a strong foundation in the basic sciences, mathematics, engineering and life sciences. The goal is to enable participants to compete successfully for engineering-related positions immediately upon graduation or to pursue post-graduate education in engineering, science, or medicine. Undergraduates will have the ability to contribute significantly to the development of new knowledge, understanding, and innovative solutions in the health care industry and across a wide variety of health care related research applications.

Department of Nuclear Science and Engineering (NSE)



The Department of NSE provides education for students interested in developing the peaceful applications of nuclear science and engineering for societal needs. Given the global climate change and fuel supply security concerns, nuclear energy is emerging as an important national energy policy element. The applications of other nuclear technologies in medicine and industry have focused attention on the value of strong nuclear science and engineering program. In response to this demand, MIST has developed a new discipline-focused program of study that prepares professionals for the many diverse applications of nuclear science and technology. Applied nuclear science is the core discipline, comprising low energy nuclear physics, biomedical, agriculture field and the interaction of ionizing radiation with matter. Most of the applications fall within three main sub-categories: nuclear power, nuclear physics and fusion technology, and the broad area of nuclear science and technology.Problems of military and national importance have consequently received great emphasis in the activities of this department.

Science and Humanities (Sc & Hum) Department

Sc & Hum Department plays a dual role in the academic framework of MIST. It supports engineering degree programs as well as offer Postgraduate degrees in various subjects. This department offers curricula of the highest quality through its seven divisions named Physics, Mathematics, Chemistry, English, Economics, Sociology and Accounting. Besides this department has Physics and Chemistry practical labs which are used to impart practical knowledge to the students related to Engineering disciplines. All divisions of this department are dedicated to fulfil the target of disseminating knowledge pertaining to higher education in all engineering programs. Faculty members of Sc & Hum Department are collectively the most qualified cluster of faculties having professional competency to the highest order. This department also plays a pivotal role to uphold the image of this premier Institution through its impeccable educational planning and its judicious application in practical arena.

REGULATORY BODIES

Council of MIST

- **Chairman:** Honourable Minister 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
  - VC, BUP
  - Engineer in Chief (E in C), Army Headquarters
  - Commandant, MIST
  - Commandant, BMA
  - Commandant, BNA
  - Commandant, BAFA
  - Representative of the VC of DU from Science and Engineering Faculty
  - Representative of the VC of BUET
  - Director Academic (Dean), MIST
  - Representative of the Ministry of Finance
  - Representative of the Ministry of Education
  - Representative of the Ministry of Science and Technology
- **Member Secretary:** Colonel Staff, MIST

Governing Body of MIST

- **Chairman**: E in C, Bangladesh Army
- **Vice Chairman:** Commandant , MIST
- **Members:**
  - Representative of the VC of DU from Science and Engineering Faculty
  - Representative of the VC of BUET
  - Representative of the VC of BUP
  - Dean/ Senior Instructor selected by Commandant MIST/ Commandant BMA
  - Dean/ Senior Instructor selected by Commandant MIST/ Commandant BNA
  - Dean/ Senior Instructor selected by Commandant MIST/ Commandant BAFA
  - Director Academic (Dean), MIST
  - Director Research & Development (R&D), MIST
  - Director Administration, MIST
  - Director, Training Directorate, AFD
  - Director Military Training Directorate, Bangladesh Army
  - Director Naval Training Directorate, Bangladesh Navy
  - Director Air Training Directorate, Bangladesh Air Force
  - Representative of Ministry of Defence
  - Representative of Ministry of Finance
  - Representative of Ministry of Education
- **Member Secretary:** Colonel Staff, MIST

Academic Council of MIST

- **Chairman:** Commandant, MIST

- **Members:**

  - Representative of the VC of DU from Science and Engineering Faculty
  - Representative of the VC of BUET
  - Representative of the VC of BUP
  - Director Academic (Dean), MIST
  - Representative of Engineering Faculty selected by Commandant BMA
  - Representative of Engineering Faculty selected by Commandant BNA
  - Representative of Engineering Faculty selected by Commandant BAFA
  - Director R&D, MIST
  - All Heads of Departments, MIST
  - Colonel Staff, MIST
  - 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

FACILITIES AND SERVICES

Class Room: MIST has adequate number of classroom with multimedia, audio and lighting systems. All the class rooms are air conditioned.

Accommodation:MIST, in principle is a residential institute. The residential hall with all modern facilities is named 'Osmany Hall' can accommodate 558 students (male 260 and female 298). Each room has internet browsing facilities. Students are provided with well-furnished accommodation.

Library:MIST has a well-arranged library enriched with about 40,000 books and a good number of periodicals, journals and magazines from home and abroad. It also subscribes a number of Bangla and English newspapers, periodicals and e-journals. In addition to that each department has its own library enriched with adequate text and reference books.

Medical Support:Civil students are provided with medical support by MIST medical centre. MIST Medical centre provides required medicine and other necessary support as prescribed by the Medical Officer. Civil student can be sent to Azmol Hospital (Mirpur 10), 3 km away from MIST for further treatment.

Transport:MIST provides bus services for the students on payment. The buses move in four routes: MIST to Shahbag, MIST to Abdullahpur, MIST to Azimpur and MIST to Banani. A student is charged with 1240 BDT per year (310 BDT per quarter) as transport charge.

Cyber Café: Cyber café provides internet browsing facilities to students and faculties.

Cafeteria:Cafeteria provides an inexpensive meal with different types of cuisine on offer.

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

Sports and Recreation: MIST has got 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, cultural competition, celebration of national days are also arranged regularly in befitting manner.

Debate Society: MIST Debate Society (MISTDS) arranges debate competition on regular basis.

Cultural Programs: To break the monotony of study different cultural programs are arranged at regular intervals.

Centre for Advisory and Testing Services (CATS): The research, consultancy and testing services, required by the industries and the Government agencies is processed, regulated, managed and overviewed by a body of MIST called "Centre for Advisory and Testing Services of MIST"; in short CATS-MIST. CATS also provide the teachers and staffs of MIST with the opportunity to be involved in research and in-depth studies and thus enriches them with the practical knowledge.

Centre for Energy, Environment Studies and Research (CEESR): Opening of "The Centre for Energy and Environmental Studies" is underway in MIST under the auspices of the department of EECE which will beengaged 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.

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 her M.Sc. program. A Research Centre named "Environment and Climate Change Studies Centre" is facilitating research work on this issue.

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.

MOU: MIST has established Memorandum of Understanding with numbers of universities in home and abroad. The universities are as follows:

Ser	University/ Institution	Year	Remark
1	Two faculties from Indian Air Force are under faculty exchange program	2009	MoU is completed
2	Wateraid Bangladesh- for rainwater harvesting system	2013	"
3	United States Naval Academy- for exchanging faculty and Joint Research Program	2013	"
4	General Sir Kotelewala Defence University, Srilanka	2014	"
5	University Technology Mara (UITM)	2014	"
6	University Kebangsaan Malaysia (UKM)	2014	"
7	University Technology Malaysia (UTM)	2014	Letter of Collaboration is Completed
8	International Islamic University Malaysia (IIUM)	2014	"
9	BUET	2013	MoU is under process
10	AIUB, World University	2014	"
11	Australian Defence Force Academy(ADFA)	"	"
12	Royal Military College of Canada(RMCC)	"	"
13	Crandfield University (UK)	"	"
14	City University, London (UK)	"	"
15	Peoples Liberation Army University of Science & Technology (PLAUST), China	"	"

Seminar: Following are the seminars conducted by various departments of MIST in 2014:

Ser	Seminar/ Workshop	Organizing Department
1	Cloud Technology- A new Dimension in Computing	CSE
2	Past, Present and Future Trend of Automobiles	ME
3	International Conference on Electrical Engineering and Information & Communication Technology (iCEEiCT-2014)	EECE
4	Workshop on Seismic Performance Assessment and Design of Structure'	CE
5	Effective Academic and Review Manuscript Writing	EECE
6	Workshop on Technique Electrical Power Quality Understanding, Standard, Events, Analysis and Mitigation Techniques	
7	1st Regional Climate Change Water Security and Prospects of Rain Water in Bangladesh	CE

LABORATORY FACILITIES

CE Department

- Environmental Engineering Laboratory
- Transportation Engineering Laboratory
- Geotechnical Engineering Laboratory
- Water Resources Engineering Laboratory
- Concrete Laboratory
- Solid Mechanics Laboratory
- GIS and Mapping Laboratory
- Drawing Laboratory

CSE Department

- Artificial Intelligence Laboratory
- Network Laboratory
- Micro Processor and Micro Controller Laboratory
- Digital Laboratory
- Software Engineering Laboratory
- Multimedia and Graphics Laboratory
- Image Processing Laboratory
- Internet Browsing Room
- Teachers' PC Laboratory
- MIST IT Cell and Central Server Room

EECE Department

- Electrical Circuit Laboratory
- Electrical Circuit Simulation Laboratory
- Computer Programming Laboratory
- Electrical Machine Laboratory
- Power System Laboratory
- Electronics & Digital Electronics Laboratory
- Electronics Circuit Simulation Laboratory
- Power Electronics Laboratory
- Instrumentation & Measurement Laboratory
- Communication Laboratory
- Digital Signal Processing Laboratory
- Microprocessor and interfacing Laboratory
- Control System Laboratory
- Switch Gear & Protection Laboratory
- VLSI Laboratory
- Digital Communication Laboratory
- Power System Protection Laboratory
- Microwave Engineering Laboratory
- Numerical Methods Laboratory

ME Department

- Measurement & Quality Control Laboratory
- Thermodynamics Laboratory
- Refrigeration & Air Conditioning Laboratory
- Heat Transfer Laboratory
- Energy Laboratory
- Machine Tools Laboratory
- Material Production Process Laboratory
- Drawing Shop (CAD Lab)
- Heat Engine Laboratory
- Applied Mechanics Laboratory
- Fluid Mechanics Laboratory

AE Department

- Applied Aerodynamics Laboratory
- Jet Propulsion Laboratory
- Radar Engineering Laboratory
- Avionics and Ground Electronics Laboratory
- Aero-structure Laboratory

NAME Department

- Ship Design Laboratory
- Marine Machinery Laboratory
- Computer Aided Ship Design Laboratory
- Heat Engine Laboratory
- Ship Structure & Fabrication Laboratory
- Instrumentation Laboratory
- Refrigeration & Air Conditioning Laboratory
- Fluid Mechanics Laboratory
- Applied Mechanics Laboratory

Sc& Hum Department

- Chemistry Laboratory
- Physics Laboratory

FACULTY MEMBERS

A group of qualified faculties drawn from military as well as from civil society including international arena are relentlessly engaged in imparting knowledge to the students. In addition, teachers from reputed universities conduct classes on particular subjects/ courses. Guest speakers/teachers from various organisations/institutions/universities are also invited to participate in teaching programs, lecturers, seminars etc. State of Instructors/ teachers of MIST are as follows:

	Armed Forces	Civil	Adjunct	Total
Professor	13	01	24	38
Associate Professor	12	02	07	21
Assistant Professor	31*	01	14	46
Lecturer	35*	05	46	86
	91	9	91	191

NUMBERS AND DURATION OF TERMS

There are two regular terms each of 22 weeks duration in an academic year for all engineering programs. Classes of each academic year normally start in the 1st weeks of February. The academic activities are conducted as per academic calendar approved by Academic Council of MIST before commencement of the programs.

Ser	Events	Duration (Weeks)
1.	Classes	07
2.	Mid Term Break	01
3.	Classes	07
4.	Recess before Term Final Examination	02
5.	Term Final Examination	03
6.	Term End Break	02
Total:		**22**

RECOGNITION OF PERFORMANCE

Osmany Memorial Gold Medal

Awarded to the best student amongst all the MIST Medal holders.

MIST Medal

Awarded to all students earning CGPA 4 at the end of the entire program and the first position holder in each department earning a minimum CGPA of 3.80

Commandant's List

- All students earning CGPA ≥ 3.8 at the end of each academic level for level 1, 2 and 3
- All graduating students earning CGPA ≥ 3.8 considering results of entire program (level 1 to 4)

Dean's List

- All students earning 3.7 ≤ CGPA < 3.8 at the end of each academic level for level 1, 2 and 3
- All graduating students earning 3.7 ≤ CGPA < 3.8 considering results of entire program (level 1 to 4)

Scholarships and Stipends

- Chancellor's(BUP) Scholarship
- Vice Chancellors (BUP) Scholarship/ Stipend
- MIST Scholarship
- MIST Stipends
- Osmany Memorial Trust Scholarship
- Buro Bangladesh Stipend
- Chief of Army Staff Scholarship
- Chief of Army Staff Stipend
- Chief of Naval Staff Scholarship
- Chief of Air Staff Scholarship
- Brig Gen Kamal Scholarship
- Brig Gen Kamal Stipend

ELIGIBILITY FOR ADMISSION TEST

Bangladeshi Students

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

- Applicants must have passed SSC/ Dhakhil/ equivalent examination from Board of Intermediate and Secondary Education/ Madrasa Education Board/Technical Education Board in Science group with minimum GPA 4.00 (without fourth subject) in a 5-point scale.
- Applicants must have passed HSC/ Alim/ equivalent examination from Board of Intermediate and Secondary Education/ Madrasa Education Board/Technical Education Board in Science group with minimum GPA 4.00 in a 5-point scale.
- In HSC/ Alim/ equivalent examination the applicant must have to obtained minimum 'A+' (A Plus) grade in any two (02) subjects out of five (05) subjects (Mathematics, Physics, Chemistry, English and Bangla) and 'A' grade in rest two (02) subjects.
- Applicants with GCE 'O' Level/equivalent background must have to qualify in minimum five (05) subjects (Mathematics, Physics, Chemistry and English) Language with minimum 'B' grade in average [i.e, A= 5, B= 4, C= 3, D= 2 & E= 1, minimum required grade point = 20].
- Applicants with GCE 'A' Level/equivalent background must have to qualify in minimum three (03) subjects including Mathematics, Physics and Chemistry with minimum 'A' in ONE subject and 'B' grades in rest two subjects. [i.e, A= 5, B= 4, minimum required grade point = 13].
- Applicants who have passed HSC or equivalent examination in the current year or one year before the notification for admission can apply.
- Sex: Male and female.

Foreign Students

Maximum 3% of overall vacancies available will be kept reserved for the foreign students and will be offered to foreign countries through AFD of the Government of the People's Republic of Bangladesh. Applicants must fulfil the following requirements:

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

NUMBER OF SEATS

The highest number of seats for 04 (four) years bachelor degree in engineering programs and 05 (five) years bachelor degree given below with Admission Test Units:

Ser	Unit	Department	Seat
1	A	Civil Engineering	**60**
2		Computer Science and Engineering	**60**
3		Electrical, Electronic and Communication Engineering	**60**
4		Mechanical Engineering	**60**
5		Aeronautical Engineering	**60**
6		Naval Architecture and Marine Engineering	**40**
7		Biomedical Engineering	**40**
8		Nuclear Science and Engineering	**40**
9		Environmental, Water Resources and Coastal Engineering	**60**
10	**B**	Architecture	**25**

The total number is 505. In general about 50% seats will be allocated to military officers. However, in case of the requirement of military students vacancy is less in any particular year, the deficient vacancy will be filled up by civil students. MIST also maintains quota for:

- Children of Military Personnel (40%)
- Children of Freedom Fighters (2%)
- Tribal Citizen (1%)
- Foreign Students (3%)

SUBMISSION OF APPLICATION- 2014

Instructions for Submission of e-Application

Application for the Admission Test- 2014 in MIST will be accepted only through online system from 01 Oct to 20 Oct 14. No manual application will be accepted unless there is some system difficulty in application process. An applicant needs to deposit Tk. 750 (Seven hundred Fifty) for unit A and 1050 (One thousand and Fifty) for B and A+B units only as application fee through SMS from Teletalk prepaid mobile phone. No fee will be accepted by MIST other than through SMS system. To complete the online application, an applicant must upload a copy of recent passport size colored photograph (exactly 300X300 pixel and maximum 100 KB size) and signature (exactly 300X80 pixel and maximum 60 KB size). Both photograph and signature should be in jpg format. Applicants must read the details given in the 'Instructions and Information for MIST Admission Test- 2014' very carefully. They may also take the printout of the instructions. Following steps to be followed to submit the application for the MIST Admission Test- 2014. For female candidates the words he and his will mean she and her.

Step 1: Filing up Online Application Form

Go to MIST website www.mist.ac.bd and Click 'Online Application' box. From 'Online Application' box select 'Online Application Form for General Education (HSC/ Alim/ Equivalent) Examination Applicants' or 'Online Application Form for GCE (A Level/ Equivalent) Applicants'. Click 'Next'.

1. For General Education (HSC / Alim / Equivalent) Examination Applicants.

a. **Applicant's Academic Information.** In the 'Application' box, put your roll number, registration number, name of board and year of passing both SSC and HSC examinations. Then select 'Next'.

b. **Applicant's Personal Information**. In the next screen, applicant's name, date of birth, gender, father's name, mother's name and nationality will be displayed. Applicant's educational qualifications of SSC / equivalent and HSC / equivalent will also be displayed. In this screen the applicant needs to fill up certain information. These are:

(I) **Choice of Units**. An applicant needs to select ONE unit from the drop down menu among Unit A (Engineering Programs); Unit B (Architecture Program) and Unit A+B (Engineering and Architecture Programs).

(II) **Category of Candidature**. There are four options; General, Children of Freedom Fighters, Tribal Citizen and Children of Military Personnel. An applicant needs to select one from drop down menu according to his category of candidature.

(III) **Address**. An applicant needs to type his address. He is to select District and Upazilla from the drop down menu.

(IV) **Contact Cellphone Number**. The applicant must give a valid **contact cellphone number** of any operator (GP, Banglalink, Airtel, CityCell, TeleTalk etc.) through which subsequent communication can be made. This mobile number is very important for subsequent communication (eg confirmation of receipt of application, eligible candidate list for admission test, admission test results etc.) with the applicant.

c. **Upload Photo & Signature**. An applicant is required to prepare two jpg format files each containing passport size photo (with exactly 300X300 pixel and maximum 100 KB size) and his signature (with exactly 300X80 pixel and maximum 60 KB size). He is to select 'Browse' button and upload the photo and signature from the drive/location. To resize applicant can take help from the link www.picresize.com.

d. **Validation Code**. There will be a validation code on the left side of the blank space. Type this code on the blank space.

e. **Declaration**. Read the statement of confirmation declaring the correctness of the given information. If you are agreed to the statement, the applicant needs to check on the 'Radio' button. Then click on the 'Submit' button.

2. For GCE (A Level/ Equivalent) Applicants.

a. **Applicant's Required Informations**. The applicant needs to type his name, father's name, mother's name. He needs to select date of birth from the 'drop Down' menu. He also needs to select the Gender 'Radio' button. Then click 'Next'.

b. **Choice of Units**. An applicant needs to select ONE unit from the drop down menu among Unit A (Engineering Programs); Unit B (Architecture Program) and Unit A+B (Engineering and Architecture Programs).

c. **Category of Candidature**. There are four options; General, Children of Freedom Fighters, Tribal Citizen and Children of Military Personnel. An applicant needs to check the appropriate 'Radio' button according to his category of candidature.

d. **Address**. The applicant needs to type his address. He is to select District and Upazilla from the drop Down menu.

e. **Contact Cellphone Number**. The applicant must give a contact cellphone number of any operator (GP, Banglalink, Airtel, CityCell, Teletalk, etc) through which subsequent communication can be made. This mobile number is very important for subsequent communication (e.g. confirmation of receipt of application, eligible candidate list for admission test, admission test results etc) with the applicant.

f. **Educational Qualification**. Type the name of the Institution and select year of passing, grade of subjects from the drop down menu for both 'O' level and 'A' level examinations.

g. **Upload Photo & Signature**. An applicant is required to prepare two jpg format files each containing passport size photo (with exactly 300X300 pixel and maximum 100 KB size) and his signature (with exactly 300X80 pixel and maximum 60 KB size). He is to select 'Browse' button and upload the photo and signature from the drive/location. To resize applicant can take help from the link www.picresize.com.

h. **Validation Code**. There will a validation code on the left side of the blank space. Type this code on the blank space.

i. **Confirmation**. Read the statement of confirmation declaring the correctness of the given information. If agreed to the statement, the applicant needs to check on the 'Radio' button. Then click on 'Submit'.

3. Then the applicant will see a preview page with his photo and signature along with other information. The applicant will get a user ID. This user ID will be required to deposit the application fee as instructed on earlier section. The applicant will get a confirmation message that the applicant completed step 1 in submitting the application. It is to be noted that the application process will not be completed until the application fee is deposited through SMS from TeleTalk prepaid cellphone phone within 24 hours from time of application as mentioned on your receipt (Student's Copy).

Step 2: Depositing Application Fee through SMS

4. Application Fees. Each applicants needs to deposit Tk. 750 (Seven hundred Fifty) for **UNIT A** (ONLY ENGINEERING PROGRAMS) and 1050 (One thousand and Fifty) for **UNIT B** (ARCHITECTURE) and **A+B** both units only as application fee through SMS from TeleTalk prepaid mobile phone within 24 (Twenty Four) hours after submitting application. Following steps are to be followed to deposit application fee:

a. Go to SMS option in TeleTalk prepaid mobile phone. Then type MIST <space> user ID. Then send to 16222. Example: Type MIST 666666 (six digit pin) then send to 16222. The applicant needs to type his user ID in place of 666666.

b. If the SMS is sent correctly, the applicant will receive a six digit PIN along with his Name and amount of application fee. The applicant will be asked to confirm the process of depositing the application fee.

c. To confirm the process of depositing the Application Fee, type MIST <space> YES <space>PIN and send to 16222. Example: Type MIST YES 777777 then send to 16222. The applicant needs to type his PIN in place of 777777.

5. The applicant will then receive a confirmation SMS from MIST in his given contact mobile number that the application is finally submitted to MIST. He will also receive a User Name and a Password. This will be required for eligible applicants to download Admit Card from 8 November 2014 onwards.

6. Submission of Certificates. Applicants of the categories of Children of Freedom Fighters (F), Tribal Citizen (T) and Children of Military Personnel (M) must sent a scan copy of required certificate/documents to mistadmission@mist.ac.bd or submit to MIST admission desk (Room 201, Tower Building-1) physically within 1430 hours by 22 October 2014. Required certificate/ documents are:

a. **Children of Freedom Fighters**. Attested copies of Freedom Fighter certificate of parents, issued by the Ministry of Freedom Fighters Affairs, People's Republic of Bangladesh.

b. **Tribal Citizen**. Attested copies of tribal citizen certificate issued by local UP chairman and

countersigned by concerned Deputy Commissioner (DC).

c. **Children of Military Personnel**. For children of military personnel, 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).

d. The submission of application of quota applicants i.e. Children of Freedom Fighters, Tribal Citizen and Children of Military Personnel will not be completed without submitting the supporting certificates/documents by 22 October 2014.

7. Contact in Case of any Difficulty. In case of any difficulty for filling up the online application, the applicants are requested to contact the 'MIST Admission Desk' (Room 201, Tower Building-1). Contact: mistadmission@mist.ac.bd Phone: 01556-565566, 01769-023896, 8000266

ADMISSION TEST

Selection of Candidates

8. A merit list of eligible candidates will be prepared on the basis of total GPA of Mathematics, Physics, Chemistry and one-third GPA of English earned in HSC/ Alim/ equivalent examination. Out of the merit list only short listed (approximately 6000) candidates will be allowed to take part in the written admission test of three hours (For Unit A) and 3+1=4 hrs (For Unit B and Unit A+B). However, all eligible candidates of reserved seats (Children of Military Personnel, Children of Freedom Fighters, Tribal Citizens) and all eligible applicants with GCE 'A' level/ equivalent background shall also be allowed to seat for admission test. The list of eligible candidates to appear admission test will be displayed in the notice board and website of MIST www.mist.ac.bd and will be intimated to individual through SMS to the contact mobile number given by the applicant.

Examination System

9. There will be no multiple choice type questions (MCQ). Question for written test will be based on the syllabus of HSC examination-2014. The marks distribution for both units is as follows:

Ser	Module	Subject	Marks	Remarks
1.	1	Mathematics	80	Total Marks: 200 Exam Duration: 3 hrs
2.		Physics	60	
3.		Chemistry	40	
4.		Functional English	20	
5.	2	Drawing and Architecture related topics	100	Total Marks: 100 Exam Duration: 3 + 1 hrs

10. Those who choose only departments of unit A, will only sit for the admission written test of Question Module 1 for **THREE** hours. Those who choose only unit B (Architecture) and both A and B (Engineering and Architecture) will sit for question module 1 and 2, with a adequate break.

11. Important Dates

Application Submission	**From 1 October to 20 October 2014 (upto midnight 12 Bangladesh Time).**
List of Eligible Candidates Publication	**7 November 2014.**
Written Admission Test For Unit A	**0900 – 1200 hours on 14 November 2014 (Friday).**
Written Admission Test For Unit B and (A+B)	**0900 – 1200 hours and 1500-1600 hours on 14 November 2014 (Friday).**
List of Selected Candidates Publication	**24 November 2014.**

FINAL SELECTION

12. Minimum qualifying marks in the written admission test is 40% for both question module 1 and 2. But in special circumstances for fulfilment of specified number of seats, President Admission Committee may consider relaxation of this condition. Merit list of candidates for final selection and admission to MIST will be prepared on the basis of the following:

13. Unit A (Engineering) and unit B (Architecture).

Written Admission Test.	75%
Total GPA of Mathematics, Physics and Chemistry of HSC/A level/equivalent examination.	15%
GPA of SSC/O level/equivalent examination (without 4th subject)	10%

14. All applicants must obtain 40% of allocated marks separately for question module 1 and 2. A merit list will be generated based on aggregate marks for required vacancies.

15. In case of tie, merit position will be determined on the basis of marks obtained in admission test in Mathematics, Physics, Chemistry and English respectively. Further dispute will be solved giving priority of result of HSC over SSC examination. The list of selected candidates for admission to MIST will be notified in the notice board, web site of MIST www.mist.ac.bd and by SMS to contact cellphone number given by the applicant.

ADMISSION PROCEDURE

Medical Check-up

Civil candidates selected provisionally are to undergo medical check-up at MIST medical centre. They will have to produce test reports of urine for R/E, blood for HBs Ag and blood grouping before the MIST medical authority. The medical authority will decide on the physical fitness of candidates for admission in MIST.

Admission

Candidates finally selected for admission will have to adhere to the following rules and procedures:

- Candidates have to complete admission formalities within a fixed period of time as decided by admission committee.
- Any candidate failing to complete admission formalities within the prescribed time will warrant cancellation of selection automatically.
- Any student failing to attend the class within two weeks of the commencement of the academic program will warrant cancellation of his/her admission and forfeiture of all fees including security deposit.
- Waiting lists will be prepared and displayed by the admission committee as per merit and be notified as per requirement.

Following documents are to be submitted during admission:

- Original copies of certificates and mark sheet of SSC/ Dakhil or equivalent examination.
- Original copies of certificate and mark sheet of HSC / Alim or equivalent examination.
- Three copies of recent passport size coloured photograph of the candidate duly attested by class-I gazetted officer.
- Character certificate from the head of the last institute attended.
- Nationality Certificate from proper authority/Birth certificate/National ID Card.
- For the Children of Freedom Fighters original copies of Freedom Fighter certificate of parents, issued by the Ministry of Freedom Fighters Affairs, People's Republic of Bangladesh.
- For Tribal Citizen; original certificate as a tribal citizen issued by local UP chairman and countersigned by concerned District Commissioner (DC).
- 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 individual merit position in the admission test at the end of admission against total vacancies. 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 to be formulated by MIST authority from time to time.

WITHDRAWAL POLICY

The MIST has been established with an aim of providing quality education in various disciplines of Engineering leading to B.Sc. Engineering to be conferred by BUP. A definite standard of education and general discipline will be followed in every level of the program. The unsuccessful students will therefore be withdrawn from the institute.

DEFINITION OF TERMS

Permanent Withdrawal

It will imply a complete/permanent discontinuity from any course/program of the institute.

Temporary Withdrawal

It 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 as set by the authority.

Permanent Expulsion

It 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.

Temporary Expulsion

It 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 fulfillment of other terms and conditions (if any) as set by the authority while approving the temporary expulsion order.

GENERAL POLICY OF WITHDRAWAL

The under graduate (B.Sc.) Engineering programs, all disciplines are planned for 04 regular levels, comprising of 08 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:

- Students failing in maximum two courses/subjects in any level, each comprising of two regular terms will be allowed to appear in the referred/re-examination on failed course(s)/subject(s) after a short term as per academic schedule.
- Referred/re-examination, after a short term is to be conducted within 02 (two) weeks of commencement of the next academic session at the latest.
- Students failing in maximum one course/subject in the referred/re-examination will be promoted to the next higher level. The failed course/subject will be termed as 'Backlog' subject and the students have to pass the 'Backlog'

subject in the next scheduled referred/re-examination, but without any short term. Otherwise, S/he will be withdrawn permanently from the course/program.

- No student will be allowed to appear in the referred/re-examination in the same subject more than twice in the whole undergraduate program.
- Students in all levels will be allowed to appear in the referred/re-examination on two courses/subjects including the 'Backlog' one.
- Students will be promoted to the second term of each level irrespective of their results in the first term of the level.
- Students failing in three or more courses/subjects in any level, comprising of two regular terms, will be allowed to repeat the level once. Students repeating a level will be granted exemption for that/those subject(s) in which they earned 'B+' and above grade in the previous academic year.
- Students will be allowed to repeat a particular level only once in the whole undergraduate program.
- After level-4 referred/re-examination, if any military student fails in maximum one course/subject, but not the 'Backlog' subject, then S/he will leave MIST and will be allowed to appear in the next scheduled referred/re-examination of the respective course. In that examination if S/he cannot pass the course/subject, or if S/he does not appear in the referred examination within 06 (six) years of registration will lose the scope of completing graduation. This failure will also be recorded in the dossier of military student officers.
- 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 from the date of his/her registration.
- Whatever may be the cases, students have to complete the whole undergraduate program within 06 (six) academic years from the date of registration.
- Failure to secure/achieve minimum CGPA of 2.20 in two consecutive levels will also lead to withdrawal of the student from the program.

EXPULSION/ WITHDRAWAL ON DISCIPLINARY GROUND

Unfair Means

Adoption 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. Following would be considered as unfair means adopted during examinations and other contexts:

- Communicating with fellow students for obtaining help in the examination.
- Copying from another student's script/report/paper.
- Copying from desk or palm of a hand or from other incriminating documents.
- Possession of any incriminating document whether used or not.

Influencing Grades

Academic council of MIST may expel/withdraw any student for approaching directly or indirectly in any form to influence a teacher or MIST authority for grades.

Other Indiscipline Behaviour

Academic council of MIST may withdraw/expel any student on disciplinary ground, if any form of indiscipline or unruly behaviour is seen in him/her which may disrupt the academic environment/program or is considered detrimental to MIST's image.

Immediate Action by the Disciplinary Committee of MIST

The disciplinary committee, MIST may take immediate disciplinary action against any student of the institution. In case of withdrawal/expulsion, the matter will be referred to the academic council, MIST for post-facto approval.

WITHDRAWAL ON OWN ACCORD

Permanent Withdrawal

A student who has already completed some courses and has not performed satisfactorily may apply for a permanent withdrawal.

Temporary Withdrawal

A student, if S/he applies, may be allowed to withdraw temporarily from the program, subject to the approval of academic council of MIST, but S/he has to complete the whole program within 06 (six) academic years from the date of his/her registration.

EXAMINATION SCHEDULE

Examination schedule of all programs run at MIST is strictly adhered to and is not changed under any circumstance. Students failing to appear at any examination will miss the grading / credit of the same.

FACULTY-STUDENT INTERACTIONS

The academic system in MIST encourages students to come in close contact with the faculties. For promotion of high level of faculty-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 faculties 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 organised in MIST where all faculty members, staffs and students are formed up, thereby increasing teacher-student interaction.

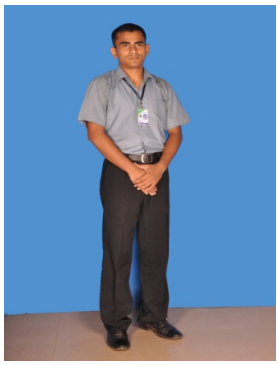
CONDUCT AND DISCIPLINE

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 organisation 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.

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		Female Student	
Summer	**Winter**	**Summer**	**Winter**
Ash coloured half sleeve shirt (tucked in), Black coloured full pants, Black Oxford shoes and Black socks.	Ash coloured full sleeve shirt (tucked in), Black coloured full pants, Blue jersey/ pull over (V-necked) Black Oxford shoes and Black socks.	Ash coloured three quarter sleeve Kamiz, White colouredSallowar and Dopatta, Black ladies shoes and socks/ Black sandal shoes.	Ash coloured three quarter sleeve Kamiz, White coloured Sallowar and Dopatta, Navy Blue cardigan (if required), Black ladies shoes and socks/ Black sandal shoes.



SUMMER

WINTER

SUMMER

WINTER

TUITION AND OTHER FEES

All civil and military students (where applicable) will be required to pay tuition and other fees as follows (subject to amendment from time to time):

	Category	Amount (tk)
Once during admission	Admission Fee	10,000
	Registration Fee	450
	Security Money/ Caution Money	20,000
	Library Fee	4,000
	Identity Card Fee	100
	Total:	34,550
Quarterly	Tuition Fee	900
	Lab & Training Equipment Maintenance Fee	600
	Medical Fee	900
	Sports Fee	300
	Students Welfare Fee	1,050
	Total:	3750
Term wise	Course Registration Fee	2,050
	Exam Fee	3,000
	Centre Fee	500
	Grade Sheet Fee	375
	Total:	5925
Yearly	Education Development Charge	25,000

HALL CHARGES

(For residential civil students)

Ser	Category	Amount (tk)	Remarks
1.	Security Deposit (One time)	5,000	Refundable
2.	Mess Advance (One time)	3,000	Refundable
3.	Admission Fee	1,000	
4.	Re-admission Fee	500	As Applicable
5.	Identity Card	100	
6.	Establishment Charge	1000	Monthly
7.	Seat Rent	300	,,
8.	Electricity, gas and water bill charge	250	,,
9.	Maintenance & Cleaning charge	250	,,
10.	Common Room Subscription	100	,,
11.	Contingencies	100	,,
12.	Messing	As per Mess bill	,,
	Total Charges:	**11,100**	

Total Charges:

1. Civil Students Total Charges- 2,42,000/- (In 4 years course)
2. Govt Employee children Total Charges- 1,92,000/- (In 4 years course)

Note :

3. Two pairs of uniforms will be provided by MIST tailor shop costing approximately tk. 3000/-

FINANCIAL TERMS AND CONDITIONS FOR FOREIGN STUDENTS

Ser	Category of Fees	Foreign Student Fees (USD)*	BDT	Remarks
1.	Admission Fee	200	15,800	Paid once
2.	Re-Admission Fee	100	7,900	When applicable
3.	Tuition Fee	12 x 4 x 4 = 192	15,168	Quarterly Basis
4.	Security Money	300	23,700	Refundable
5.	Library Fee	51	4,029	Paid once
6.	Registration Fee	10	790	Paid once
7.	Exam Fee	40 x 8 =320	25,280	Eight-term Exam
8.	Centre Fee	6.5 x 8 = 52 (For each referred exam additional 20 to be paid)	4,108	Eight-term Exam
9.	Grade Sheet Fee	5 x 8 = 40	3,160	Eight-term Exam
10.	General Medical Fee (Excluding Critical/special cases)	20 x 4 x 4=320	25,280	Quarterly Basis
11.	Sports Fee	5 x 4 x 4 = 80	6,320	Quarterly Basis
12.	Students Welfare Fee	20 x 4x 4 = 320	25,280	Quarterly Basis
13.	Course Registration Fee	30 x 8 =240 (Approx)	18,960	Term Wise
14.	Laboratory and Training Maint Fee	16 x 8 = 128 (Approx)	10,112	Term Wise
15.	Accommodation Fee	50 x 12 x 4 =2400 (bachelor/married bachelor)	1,89,600	Monthly basis (Military & Civil) For Mil Officers Only
		450 x 12 x 4= 21,600 (Family)	17,06,400	
16.	Messing	75 x 12 x 4 = 3,600	2,84,400	For Civil Students (For regular meal only) **
17.	Laundry and Allied Charges	10x 12 x 4 = 480	37,920	Monthly basis
18.	Recreation Fee/ Study Tour	200 x 4 = 800 (Bachelor)	63,200	Yearly basis (Optional; only Interested persons will pay)
		300 x 4 = 1200 (Family)	94,800	
19.	MIST Uniform	12 x 5 sets = 60	4,740	
20.	Education Development Charge	475 x 4 = 1900	1,50,100	4 Years
Total (Bachelor)		**11,593**	**9,15,847**	
Total (Family)		**31,193**	**24,64,247**	

Assume

* = **1$ = 79 BDT (**It will be as per Bangladesh Bank, the day of payment.)

** = **$150 x 12 x 4 = 7,200** (Actual cost will be charged) (Tk 5,68,800.00) For **Military Officers** who will be staying in the Officers Mess.

*** = **RECIPROCAL** and **GRATIS** to be executed as per agreement/MoU or negotiable between the two friendly institution, organization, government authority.

N.B. Scholarship will be given to the meritorious students as per MIST Scholarship Policy.

PROGRAM REQUIREMENTS

Details of courses (subjects), contact hours, credit hours etc are shown separately at the end of this prospectus. However, these are subject to revision and updating prior to each academic year.

GRADING SYSTEM

Total performance of a student in a given program is based on a scheme of continuous assessment. For theory course, this continuous assessment is made through a set of class tests, evaluation, class participation, homework, assignment and term final examination. The assessment in sessional courses is made through observation of the student at work during the class, viva voce during lab hours, sessional reports and quizzes. Each course has a certain number of credits, which describes its corresponding weights. A letter grade with a specified number of grade point is awarded to each course for which a student is measured both by the number of credits completed satisfactorily and by the weighted average of the grade point earned. A minimum Grade Point Average (GPA) is essential for satisfactory progress. A minimum number of earned credits also have to be acquired in order to qualify for the degree. Letter grades and corresponding grade points is awarded in accordance with the provisions shown below:

Grade	Grade Points	Numerical Marking
A+	4.00	80% and above
A	3.75	75% to less than 80%
A-	3.50	70% to less than 75%
B+	3.25	65% to less than 70%
B	3.00	60% to less than 65%
B-	2.75	55% to less than 60%
C+	2.50	50% to less than 55%
C	2.25	45% to less than 50%
D	2.00	40% to less than 45%
F*	0.00	Below 40%
I	Incomplete	-
W	Withdrawn	-
X	-	Project/Thesis continuation

COURSE PATTERN AND CREDIT STRUCTURE

COURSE PATTREN AND CREDIT STRUCTURE

The program is covered by a set of theoretical courses along with a set of lab/ sessional (practical) courses to support them. The rules for assignment of credit are as follows:

- Theoretical Course - One contact hour of lecture per week per term is equivalent to one credit
- Sessional Courses - Credits for sessional course (practical class) are half of the contact hours per week per term
- Thesis/Project - Credits are also assigned to project and thesis works taken by the student. The amount of credits assigned to such works varies from one discipline to another

COURSE SYSTEM

- Introduction of letter grades and grade points instead of numerical grades following the guidelines of University Grant Commission (UGC)
- Continuous evaluation of student performance
- Promotion of student-teacher relation

COURSE DESIGNATION

- The first digit corresponds to the year/ level in which the students normally undertake the course
- The second digit is reserved for departmental uses. It usually identifies a specific area of study within the department
- The last digit is an odd number for theoretical course and an even number for sessional course

For example CE 361 means:

CE	-	Departmental identification (Civil Engineering Department)
3	-	Signifies level of courses (Level- 3)
6	-	Subject code (reserved for departmental use)
1	-	Odd digit designates a theoretical course

DISTRIBUTION OF CREDIT HOURS

CE Department

Level	Term	Credit Hour
1	I	18.50
	II	21.00
2	I	20.00
	II	20.50
3	I	21.50
	II	23.00
4	I	19.00
	II	18.50
Total Credit Hours:		**162.00**

CSE Department

Level	Term	Credit Hour
1	I	20.00
	II	20.75
2	I	20.25
	II	20.75
3	I	19.25
	II	20.75
4	I	20.75
	II	19.50
Total Credit Hours:		**162.00**

EECE Department

Level	Term	Credit Hour
1	I	20.50
	II	19.00
2	I	21.00
	II	19.00
3	I	19.50
	II	20.50
4	I	21.00
	II	18.00
Total Credit Hours:		**158.50**

ME Department

Level	Term	Credit Hour
1	I	20.50
	II	19.50
2	I	21.00
	II	19.75
3	I	20.50
	II	20.75
4	I	20.25
	II	19.75
Total Credit Hours:		**162.00**

AE Department

Level	Term	Credit Hour	
		Aerospace	Avionics
1	I	20.25	20.25
	II	21.25	21.25
2	I	19.25	21.25
	II	18.75	19.50
3	I	21.50	19.75
	II	19.25	19.75
4	I	20.50	20.25
	II	20.75	19.50
Total Credit Hour:		**161.50**	**161.50**

NAME Department

Level	Term	Credit Hour
1	I	19.25
	II	19.50
2	I	19.50
	II	20.25
3	I	20.25
	II	22.00
4	I	21.00
	II	19.50
Total Credit Hours:		**161.25**

BME Department

Level	Term	Credit Hour
1	I	20
	II	18.5
2	I	22.5
	II	18.5
3	I	19.5
	II	21
4	I	24
	II	21
Total Credit Hours:		165

EWCE Department

Level	Term	Credit Hour
1	I	19.5
	II	20
2	I	20.5
	II	19.5
3	I	21.5
	II	21.5
4	I	19
	II	20.5
Total Credit Hours:		162

NSE Department

Level	Term	Credit Hour
1	I	20.5
	II	18
2	I	19
	II	18.75
3	I	21
	II	21
4	I	21
	II	19.5
Total Credit Hours:		158.75

B. Arch Department

Level	Term	Credit Hour
1	I	19
	II	19
2	I	19
	II	21.5
3	I	19.5
	II	21.5
4	I	21.5
	II	21.5
5	I	21.5
	II	20
Total Credit Hours:		204

Note: Minimum credit hour for awarding Engineering Degree for all departments is **157**.

DISTRIBUTION OF MARKS

Theory Courses

Thirty percent (30%) of marks shall be allotted for continuous assessment i.e, class participation / observation, class attendance, homework, assignment and class tests. The remaining 70% marks will be allotted to term final examination, which will be conducted centrally by the Institute. There will be internal and external examiners for each course in the term final examination. The distribution of marks for a given course is as follows:

Class Participation/Observations	5%
Class Attendance	5%
Homework Assignment and Class Test	20%
Final Examination (Sec A + Sec B)	70%
Total:	100%

Marks in Attendance

Basis for awarding marks for class participation and attendance is as follows:

Attendance	Marks
90% and above	100%
85% to less than 90%	90%
80% to less than 85%	80%
75% to less than 80%	70%
70% to less than 75%	60%
65% to less than 70%	50%
60% to less than 65%	40%
Below 60%	00%

Sessional Courses

Thesessional or part of sessional courses will be conducted and assessed throughout the term. In addition, the concerned teacher shall arrange final quiz/examination.

CALCULATION OF GPA AND CGPA

Grade Point Average (GPA) is the weighted average of the grade points obtained in all the courses passed/completed by a student. For example, if a student passes/completes n courses in a term having credits of C_1, C_2, … , Cn and his grade points in these courses are G_1, G_2, … , Gn respectively then:

$$GPA = \frac{\sum_{i=1}^{n} C_i * G_i}{\sum_{i=1}^{n} C_i}$$

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 TC_1, TC_2, … , TC_n and his GPA in these terms are GPA_1, GPA_2, … , GPA_n respectively then:

$$CGPA = \frac{\sum_{i=1}^{n} TC_i * GPA_i}{\sum_{i=1}^{n} TC_i}$$

EXAMINATION SYSTEM

Home Work/ Assignment

Individual teacher will decide

Number of Class Test

n + 1, where, n = no of credit hours of the course

Final Examination

Written examination for theory courses (Sec A + Sec B)

Referred/Short Term

For failed students as per Examination Policy

REFERRED/ SHORT TERM EXAMINATION

Those who will not be able to clear all the subjects will require to appear in the Referred/ Short Term Examination fulfilling the conditions as per examination policy.

PICTURE GALLERY

12TH GRADUATION CEREMONY

REGULATORY BODIES MEETING

MICROCONTROLLER-BASED EMBEDDED SYSTEM DESIGN COURSE

CERTIFICATE COURSE ON PROFESSIONAL GIS

WORKSHOP ON SEISMIC PERFORMANCE ASSESSMENT AND DESIGN OF STRUCTURES

SEMINAR ON 'CLOUD TECHNOLOGIES – A NEW DIMENSION IN COMPUTING'

SIGNING OF MOU BETWEEN MIST AND IIT JAHANGIRNAGAR UNIVERSITY

AIAA FOUNDATION DESIGN/BULID/FLY COMPETITION-2014

SEMINAR ON 'PAST, PRESENT AND FUTURE TRENDS OF AUTOMOBILES'

INTERNATIONAL CONFERENCE ON ICEEICT-2014 AT MIST

EDUCATIONAL COLLABORATION EFFORT WITH UK UNIVERSITIES

INTERNATIONAL COLLABORATION BETWEEN MIST AND UNIVERSITIES AT MALAYSIA

"MONGOL BAROTA"- THE MIST DEVELOPED ROVER - ON THE WAY TO THE MARS, 2014

PARTICIPANTS OF MIST IN SAE AERO-DESIGN COMPETITION-2014, USA

INTERNATIONAL ELECTRIC SOLAR VEHICLE

VISIT OF KUWAIT MILITARY DELIGATION

INTER-DEPT ATHLETICS COMPETITION-2014

INTER-DEPT FOOTBALL COMPETITION-2014

INTER-DEPT DEBATE COMPETITION-2014

WOMEN VOLLYBALL FINAL

CLASS IN PROGRESS

INTER-FACING LAB

HEAT ENGINE LAB

SESSIONAL IN PROGRESS

PHYSICS LAB

NOBIN BORON-2014

GRADUATION DINER-2014

JOB FAIR-2014

MIST CAPTAIN

MIST ADMISSION TEST-2013

POHELA BOISHAK-1421

MEDICAL CENTER

CENTRAL LIBRARY

FITNESS CENTER

MIST CAFETERIA

TEACHERS' ACCOMODATION

OSMANY HALL- MALE WING

OSMANY HALL- FEMALE WING

CIVIL ENGINEERING
Total Credit Hours: 162

Level-1, Term-I

Course Code	Course Title	Contact Hour	Credit Hour
CE 100	Civil Engineering Drawing	3	1.5
CE 101	Analytic Mechanics	3	3
Phy 101	Physical Optics, Waves and Oscillation, Heat and Thermodynamics	3	3
Chem 103	Chemistry I	3	3
Chem 114	Inorganic Quantitative Analysis	3	1.5
Math 137	Differential and Integral Calculus, Matrices	3	3
Hum 175 / Hum 155	Government / Sociology	2	2
Shop 132	Workshop Sessional	3	1.5
	Total:	**23**	**18.5**

Level-1, Term-II

Course Code	Course Title	Contact Hour	Credit Hour
CE 102	Computer Aided Drafting	3	1.5
CE 103	Surveying and spatial information Engineering	4	4
Phy 105/ Chem 105	Structure of Matter, Electricity and Magnetism and Modern Physics/ Chemistry II	3	3
Phy 102	Physics Laboratory	3	1.5
Math 139	Differential Equations and Statistics	3	3
EECE 165	Basic Electrical Technology	3	3
Hum 185	English	2	2
Hum 186	Developing English Language Skills	3	1.5
CE 104	Practical Surveying	3.0 Weeks	1.5
	Total:	***27**	**21**

Level-2, Term-I

Course Code	Course Title	Contact Hour	Credit Hour
CE 200	Details of Construction	3	1.5
CE 201	Engineering Materials	3	3
CE 202	Materials Sessional	3	1.5
CE 203	Engineering Geology & Geomorphology	3	3
CE 211	Mechanics of Solids I	3	3
CE 204	Computer Programming Sessional	3	1.5
CE 210	GIS and Remote Sensing	3	1.5
Math 237	Laplace Transform and Vector Analysis	3	3
	Total:	**26**	**20**

Level-2, Term-II

Course Code	Course Title	Contact Hour	Credit Hour
CE 205	Numerical Methods	2	2
CE 206	Engineering Computations Sessional	3	1.5
CE 208	Quantity Surveying	3	1.5
CE 213	Mechanics of Solids II	3	3
CE 261	Fluid Mechanics	3	3
CE 262	Fluid Mechanics Sessional	3	1.5
CE 207	Applied Mathematics for Engineers	3	3
CE 212	Structural Mechanics & Materials Sessional	3	1.5
CE 214	Architectural, Engineering and Planning Appreciation	3	1.5
	Total:	**28**	**20.5**

Level-3, Term-I

Course Code	Course Title	Contact Hour	Credit Hour
CE 311	Structural Analysis & Design I	4	4
CE 315	Design of Concrete Structures I	3	3
CE 331	Environmental Engineering I	3	3
CE 341	Principle of Soil Mechanics	4	4
CE 342	Geotechnical Engineering Laboratory	3	1.5
CE 332	Environmental Engineering Laboratory	3	1.5
CE 301	Professional Practices and Communication	3	3
CE 302	Professional Practices and Communication Sessional	3	1.5
	Total:	**26**	**21.5**

Level-3, Term-II

Course Code	Course Title	Contact Hour	Credit Hour
CE 316	Concrete Structures Design Sessional I	3	1.5
CE 317	Design of Concrete Structures II	3	3
CE 300	Civil Engineering Students' Internship Program (CESIP)	4 Weeks	1.5
CE 319	Design of Steel Structures	3	3
CE 320	Steel Structures Design Sessional	3	1.5
CE 351	Transportation Engineering I: Transportation Planning and Traffic Engineering	3	3
CE 361	Open Channel Flow	4	4
CE 362	Open Channel Flow Sessional	3	1.5
CE 333	Environmental Engineering II	4	4
	Total:	**26***	**23**

Level-4, Term-I

Course Code	Course Title	Contact Hour	Credit Hour
CE 400	Project & Thesis	3	1.5
CE 401	Project Planning & Construction Management	3	3
CE 411	Structural Analysis & Design II	3	3
CE 463	Hydrology, Irrigation & Flood Management	3	3
CE 441	Foundation Engineering	3	3
CE 451	Transportation Engineering II: Pavement Design and Railway Engineering	4	4
CE 452	Transportation Engineering Sessional I: Highway Materials and Transportation Engineering Design	3	1.5
	Total:	**22**	**19**

Level-4, Term-II

Course Code	Course Title	Contact Hour	Credit Hour	Remarks
CE 400	Project & Thesis	6	3	
CE 410	Concrete Structures Design Sessional II	3	1.5	
CE 403	Socio-economic Aspects of Development Project	3	3	Select Any One
CE 405	Business and Carrier Development	3	3	
CE 413	Introduction to Steel-Concrete Composite Structure	2	2	Select Any Two
CE 415	Prestressed Concrete	2	2	
CE 417	Design of Concrete Structures III	2	2	
CE 419	Introduction to Finite Element Method	2	2	
CE 421	Dynamics of Structures	2	2	
CE 412	Computer Aided Analysis and Design of Structures Sessional	3	1.5	
CE 433	Solid and Hazardous Waste Management	2	2	Select Any Two
CE 435	Environmental Pollution Management	2	2	
CE 437	Environmental and Sustainable Management	2	2	
CE 432	Design of Water Supply, Sanitation and Sewerage Systems	3	1.5	
CE 443	Earth Retaining Structures	2	2	Select Any Two
CE 445	Elementary Soil Dynamics	2	2	
CE 447	Soil-Water Interaction	2	2	
CE 442	Geotechnical Engineering Design Sessional	3	1.5	
CE 453	Transportation Engineering III: Traffic Engineering Design & Management	2	2	Select Any Two
CE 455	Transportation Engineering IV: Pavement Management, Drainage & Airports	2	2	
CE 457	Transportation Engineering V: Urban Transportation Planning & Management	2	2	
CE 454	Transportation Engineering Sessional II: Pavement Design and Traffic Studies	3	1.5	
CE 465	Groundwater Engineering	2	2	Select Any Two
CE 469	River Engineering	2	2	
CE 471	Hydraulic Structures	2	2	
CE 467	Flood Mitigation and Management	2	2	
CE 473	Coastal Engineering	2	2	
CE 472	Water Resources Engineering Sessional	3	1.5	
	Total:	**26**	**18.5**	

COMPUTER SCIENCE AND ENGINEERING

Total Credit Hours: 162

Level-1, Term-I

Course Code	Course Title	Contact Hour	Credit Hour
CSE-100	Introduction to Computer Systems Sessional	3.00	1.50
EECE-163	Electrical Circuit Analysis	3.00	3.00
EECE-164	Electrical Circuit Analysis Sessional	3.00	1.50
ME-181	Basic Mechanical Engineering	2.00	2.00
MATH-141	Mathematics-I (Differential Calculus and Integral Calculus)	3.00	3.00
PHY-103	Physics	3.00	3.00
PHY-104	Physics Sessional	1.50	0.75
HUM-101	English	2.00	2.00
Shop-140	Workshop Practice Sessional	1.50	0.75
Total		22	17.5

Level-1, Term-II

Course Code	CourseTitle	Contact Hour	Credit Hour
CSE-101	Discrete Mathematics	3.00	3.00
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	3.00	1.50
CE-150	Engineering Drawing & CAD Sessional	3.00	1.50
CHEM-101	Chemistry	3.00	3.00
MATH-143	Mathematics-II (Ordinary and Partial Differential Equations and Coordinate Geometry)	3.00	3.00
Total:		24	19.5

Level-2, Term-I

Course Code	Course Title	Contact Hour	Credit Hour
CSE-201	Digital Logic Design	3.00	3.00
CSE-202	Digital Logic Design Sessional	3.00	1.50
CSE-203	Data Structures	3.00	3.00
CSE-204	Data Structures Sessional	3.00	1.50
CSE-205	Object Oriented Programming Language	3.00	3.00
CSE-206	Object Oriented Programming Language Sessional	3.00	1.50
EECE-269	Electrical Drives and Instrumentation	3.00	3.00
EECE-270	Electrical Drives and Instrumentation Sessional	1.50	0.75
MATH-245	Mathematics-III (Vector Analysis, Matrices and Fourier Analysis)	3.00	3.00
Total:		25.5	20.25

Level –2, Term-II

Course Code	CourseTitle	Contact Hour	Credit Hour
CSE-210	Assembly Language Programming Sessional	3.00	1.50
CSE-211	Digital Electronics and Pulse Technique	3.00	3.00
CSE-212	Digital Electronics and Pulse Technique Sessional	1.50	0.75
CSE-213	Computer Architecture	3.00	3.00
CSE-215	Algorithms	3.00	3.00
CSE-216	Algorithms Sessional	3.00	1.50
CSE-217	Theory of Computation	3.00	3.00
CSE-220	Object Oriented Programming language Sessional-II	1.50	0.75
MATH-247	Mathematics-IV (Complex Variable and Laplace Transform)	3.00	3.00
HUM-215	Engineering Ethics	2.00	2.00
Total:		26	21.5

Level-3, Term-I

Course Code	CourseTitle	Contact Hour	Credit Hour
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 and Micro-controller	3.00	3.00
CSE-306	Microprocessors and Micro-controller Sessional	1.50	0.75
CSE-307	Operating System	3.00	3.00
CSE-308	Operating System Sessional	1.50	0.75
CSE-309	Computer Network	3.00	3.00
CSE-310	Computer Network Sessional	3.00	1.50
	Total:	**25.5**	**20.25**

Level-3, Term II

Course Code	CourseTitle	Contact Hour	Credit Hour
CSE-311	Numerical Analysis	3.00	3.00
CSE-313	Mathematical Analysis for Computer Science	3.00	3.00
CSE-315	Digital System Design	3.00	3.00
CSE-316	Digital System Design Sessional	1.50	0.75
CSE-317	Data Communication	3.00	3.00
CSE-318	Data Communication Sessional	1.50	0.75
CSE-319	Software Engineering	3.00	3.00
CSE-322	Software Development Sessional	3.00	1.50
HUM-315	Engineering Economics	2.00	2.00
HUM-312	English Sessional	3.00	1.50
Total:		26	21.5

*LEVEL-3 INDUSTRIAL TRAINING

Course Code	Course Title	Contact Hour	Credit Hour
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.

Level-4, Term-I

Course Code	CourseTitle	Contact Hour	Credit Hour
CSE-400	Project and Thesis	6.00	3.00
CSE-401	System Analysis, Design and Development	3.00	3.00
CSE-402	System Analysis, Design and Development Sessional	1.50	0.75
CSE-403	Artificial Intelligence	3.00	3.00
CSE-404	Artificial Intelligence Sessional	1.50	0.75
CSE-405	Computer Interfacing	3.00	3.00
CSE-406	Computer Interfacing Sessional	1.50	0.75
CSE-407	Applied Statistics and Queuing Theory	3.00	3.00
CSE-4XO	Option-I	3.00	3.00
Total:		25.5	20.25

Option-I

Course Code	Course Title	Contact Hour	Credit Hour
CSE-419	Advanced Algorithms	3.00	3.00
CSE-421	Basic Graph Theory	3.00	3.00
CSE-423	Fault Tolerant System	3.00	3.00
CSE-425	Basic Multimedia Theory	3.00	3.00
CSE-427	Digital Image Processing	3.00	3.00
CSE-429	Data and Network Security	3.00	3.00
CSE-431	Object Oriented Software Engineering	3.00	3.00
CSE-433	Artificial Neural Networks and Fuzzy Systems	3.00	3.00
CSE-435	Distributed Algorithms	3.00	3.00
CSE-437	Bioinformatics	3.00	3.00
CSE-439	Robotics	3.00	3.00
CSE-441	Machine Learning	3.00	3.00

Level-4, Term-II

Course Code	CourseTitle	Contact Hour	Credit Hour
CSE-400	Project and Thesis*	6.00	3.00
CSE-411	VLSI Design	3.00	3.00
CSE- 410	Software Development for Web Apps	1.50	0.75
CSE-413	Computer Graphics	3.00	3.00
CSE-414	Computer Graphics Sessional	1.50	0.75
HUM-415	Financial and managerial Accounting	2.00	2.00
CSE-417	Engineering Management	3.00	3.00
CSE-4XO	Option-II	3.00	3.00
CSE-4XE	Option-II Sessional	1.50	0.75
	Total	24.5	19.25

Option-II

Course Code	Course Title	Contact Hour	Credit Hour
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- 447	Telecommunication Engineering	3.00	3.00
CSE- 448	Telecommunication Engineering 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-453	Data Ware-housing and Data Mining	3.00	3.00
CSE-454	Data Ware-housing and Data Mining Sessional	1.50	0.75

ELECTRICAL, ELECTRONIC AND COMMUNICATION ENGINEERING

Total Credit Hours: 158.5

Level–1, Term-I

Course Code	Course Name	Contact Hour	Credit Hour
EECE 101	Electrical Circuits I	3	3
PHY 111	Phy I (Waves and Oscillation, Optics and Thermal Physics)	3	3
PHY 112	Phy I Laboratory	3	1.5
MATH 111	Differential and Integral Calculus	4	4
CE 152	Engineering Drawing	3	1.5
CHEM 101	Chem I	3	3
CHEM 114	Inorganic and Quantitative Analysis Laboratory	3	1.5
HUM 127	Sociology	3	3
Total:		**25**	**20.5**

Level–1, Term-II

Course Code	Course Name	Contact Hour	Credit Hour
EECE 105	Electrical Circuits II	3	3
EECE 106	Electrical Circuits Laboratory	3	1.5
EECE 110	Electrical Circuits Simulation Laboratory	3	1.5
PHY 113	Phy II (Electricity and Magnetism, Modern Physics and Mechanics)	3	3
PHY 114	Phy II Laboratory	3	1.5
MATH 115	Vector analysis, Matrices and Geometry	4	4
CSE 109	Computer Programming	3	3
CSE 110	Computer Programming Laboratory	3	1.5
Total:		**25**	**19**

Level–2, Term-I

Course Code	Course Name	Contact Hour	Credit Hour
EECE 201	Electronics I	3	3
EECE 203	Electrical Machines I	3	3
ME 263	Fundamentals of Mechanical Engineering	3	3
ME 264	Fundamentals of Mechanical Engineering Laboratory	3	1.5
Math 211	Math (Ordinary and Practical Differential equation) (3)	3	3
Hum 235	English	3	3
Hum 272	Developing English Skills Laboratory	3	1.5
Hum 277	Fundamentals of Economics	3	3
Total:		**24**	**21**

Level–2, Term-II

Course Code	Course Name	Contact Hour	Credit Hour
EECE 205	Electrical Machines II	3	3
EECE 206	Electrical Machines laboratory	3	1.5
EECE 207	Electronics II	3	3
EECE 208	Electronics Laboratory	3	1.5
EECE 210	Electronic Circuit Simulation Laboratory	3	1.5
EECE 212	Numerical Technique Laboratory	3	1.5
Math 213	Math (Complex Variable & Statistics) (4)	4	4
Hum 279	Financial and Managerial Accounting	3	3
Total:		**25**	**19**

Level-3, Term-I

Course Code	Course Name	Contact Hour	Credit Hour
EECE 301	Continuous Signals and Linear Systems	3	3
EECE 303	Digital Electronics	3	3
EECE 304	Digital Electronics Laboratory	3	1.5
EECE 305	Power System I	3	3
EECE 306	Power System I Lab	3	1.5
EECE 307	Electrical Properties of Material	3	3
EECE 313	Instrumentation and Measurement	3	3
EECE 314	Electrical Services Design	3	1.5
Total:		**24**	**19.5**

Level-3, Term-II

Course Code	Course Name	Contact Hour	Credit Hour
ME 393	Industrial Management	3	3
EECE 309	Communication Theory	3	3
EECE 310	Communication Laboratory	3	1.5
EECE 311	Digital Signal Processing I	3	3
EECE 312	Digital Signal Processing I Laboratory	3	1.5
EECE 315	VLSI-1	3	3
EECE 316	VLSI-1 Lab	3	1.5
EECE 317	Engineering Electromagnets	3	3
EECE 320 #	Industrial Training/attachment	3/4 weeks	1
Total:		**24**	**20.5**

#EECE 320 (Industrial Training/attachment) will be conducted after the term end exam of term-2.

Level-4, Term-I

Course Code	Course Name	Contact Hour	Credit Hour
EECE 400	Project/ Thesis	6	3
EECE 401	Control System I	3	3
EECE 402	Control System I Laboratory	3	1.5
EECE 403	Telecommunication Engineering	3	3
EECE 405	Solid State Devices	3	3
EECE 4 **	Elective I	3	3
EECE 4 **	Elective II	3	3
EECE 4 **	Elective II Lab	3	1.5
Total:		**27**	**21**

Level-4, Term-II

Course Code	Course Name	Contact Hour	Credit Hour
EECE 400	Project/Thesis	6	3
EECE 407	Microprocessors and Interfacing	3	3
EECE 408	Microprocessor and Interfacing Laboratory	3	1.5
EECE 4 **	Elective III	3	3
EECE 4 **	Elective IV	3	3
EECE 4 **	Elective V	3	3
EECE 4 **	Elective V Laboratory	3	1.5
Total:		**24**	**18**

Note: Students will be assigned one of the three groups viz power, electronics and communications. A student will have to take at least 3 elective theory courses from the respective group. The remaining (2) elective theory courses may be selected from the respective group or other groups or interdisciplinary group or combination of these groups.

Power

Course Code	Course Name	Credit Hour
EECE 471	Power System II	3
EECE 473	Power Electronics	3
EECE 474	Power Electronics Laboratory	1.5
EECE 475	Power Plant Engineering	3
EECE 477 or EECE 483	Power System Protection OR High Voltage Engineering	3
EECE 478 or EECE484	Power System Protection Laboratory OR High Voltage Engineering Laboratory	1.5
EECE 479	Power System Reliability	3
EECE 481	Power System Operation and Control	3
EECE 485	Electrical Machines III	3

Electronics

Course Code	Course Name	Credit Hour
EECE 451	Processing and Fabrication Technology	3
EECE 453	Analog Integrated Circuits	3
EECE 455	Compound Semiconductor and Hetero-junction Device	3
EECE 457	VLSI II	3
EECE 458	VLSI II Laboratory	1.5
EECE 459	Opto-electronics	3
EECE 461	Semiconductor Device Theory	3

Communication

Course Code	Course Name	Credit Hour
EECE 431	Digital Signal Processing II	3
EECE 433	Microwave Engineering	3
EECE 434	Microwave Engineering laboratory	1.5
EECE 435	Optical Fiber Communication	3
EECE 437	Digital Communication	3
EECE 438	Digital Communication Laboratory	1.5
EECE 439	Mobile Cellular Communication	3
EECE 441	Random Signals and Processes	3
EECE 443	Satellite Communication	3
EECE 444	Satellite Communication Laboratory	1.5

Interdisciplinary

Course Code	Course Name	Credit Hour
EECE 421	Control System II	3
EECE 422	Control System II Laboratory	1.5
EECE 423	Numerical Methods	3
EECE 424	Numerical Methods Laboratory	1.5
EECE 425	Biomedical Instrumentation	3
EECE 426	Biomedical Instrumentation Laboratory	1.5
EECE 427	Radar Engineering	3
EECE 428	Radar Engineering Laboratory	1.5
EECE 491	Sonar and Underwater Engineering	3
EECE 492	Sonar and Underwater Engineering Laboratory	1.5
EECE 293	Electronic Warfare	3
EECE 494	Electronic Warfare Laboratory	1.5
EECE 495	Avionics Engineering	3
EECE 496	Avionics Engineering laboratory	1.5
CSE 451	Computer Networks	3
CSE 452	Computer Networks Laboratory	1.5
CSE 491	Microprocessor System Design	3
CSE 492	Microprocessor System Design Laboratory	1.5

MECHANICAL ENGINEERING

Total Credit Hours: 162

LEVEL-1, TERM-I

Course Code	Course Name	Contact Hour	Credit Hour
Phy 105	Structure of Matter, Electricity and Magnetism and Modem Physics	3	3
Chem 101	Chemistry-1	3	3
Math 161	Differential and Integral Calculus	4	4
ME161	Introduction to Mechanical Engineering	3	3
EECE159	Fundamentals of Electrical Engineering	3	3
Chem 114	Inorganic Quantitative Analysis Sessional	3	1.5
EECE160	Fundamental of Electrical Engineering Sessional	3/2	0.75
Shop 160	Foundry and Welding Shop Sessional	3/2	0.75
ME 160	Mechanical Engineering Drawing-1	3	1.5
Total:		**25**	**20.5**

LEVEL-1, TERM-II

Course Code	Course Name	Contact Hour	Credit Hour
Phy 107	Waves and Oscillation, Geometrical Optics and Wave Mechanics	3	3
Chem 141	Chemistry of Engineering Materials	3	3
Math 161	Vector analysis, Matrices and Coordinate Geometry	4	4
ME 171	Computer Programming Language	3	3
Hum 101	English	2	2
Hum 102	Technical Report Writing and Presentation	3	1.5
Phy 102	Physics Sessional	3	1.5
ME 172	Computer Programming Language Sessional	3/2	0.75
Shop 170	Machine Shop Practice	3/2	0.75
Total:		**24**	**19.5**

LEVEL –2, TERM – I

Course Code	Course Name	Contact Hour	Credit Hour
ME 241	Engineering Mechanics	3	3
EECE 259	Electrical and Electronics Technology	4	4
Math 261	Ordinary and partial Differential Equation	4	4
ME 201	Basic Thermodynamics	4	4
Hum[1]	Select from the prescribed courses	3	3
EECE 260	Electrical and Electronics Technology Sessional	3	1.5
ME 202	Basic Thermodynamics Sessional	3/2	0.75
ME 242	Engineering Mechanics Sessional	3/2	0.75
Total:		**24**	**21**

LEVEL-2, TERM-II

Course Code	Course Name	Contact Hour	Credit Hour
ME 291	Metallic Materials	3	3
ME 261	Numerical Analysis	3	3
ME 243	Mechanics of Solids	3	3
Math 263	Fourier Analysis, Harmonic functions, Laplace Transform and Complex variable	4	4
Hum[1]	Select from the prescribed courses	3	3
ME 292	Metallic Materials Sessional	3/2	0.75
ME 262	Numerical Analysis Sessional	3/2	0.75
ME 244	Mechanics of solids Sessional	3/2	0.75
ME 260	Mechanical Engineering Drawing –II	3	1.5
Total:		**23.5**	**19.75**

LEVEL-3, TERM-I

Course Code	Course Name	Contact Hour	Credit Hour
ME 341	Machine Design –1	3	3
ME 321	Fluid Mechanics – 1	3	3
ME 345	Mechanics of Machinery	4	4
ME 301	Conduction and Radiation Heat Transfer	3	3
ME 361	Instrumentation and Measurement	3	3
ME 342	Machine Design Sessional-1	3/2	0.75
ME 322	Fluid Mechanics Sessional-1	3/2	0.75
ME 346	Mechanics of Machinery Sessional	3	1.5
ME 302	Heat Transfer Sessional	3/2	0.75
ME 362	Instrumentation and Measurement Sessional	3/2	0.75
Total:		**25**	**20.5**

LEVEL –3, TERM – II

Course Code	Course Name	Contact Hour	Credit Hour
ME 331	Production Processes	4	4
ME 323	Fluid Mechanics – II	3	3
ME 343	Machine Design – II	3	3
ME 381	Measurement and Quality Control	3	3
ME 303	Convection, Boiling, Condensation and Mass Transfer	3	3
ME 332	Production Process Sessional	3/2	0.75
ME 324	Fluid Mechanics Sessional-II	3/2	0.75
ME 344	Machine Design Sessional-II	3/2	0.75
ME 382	Measurement and Quality Control Sessional	3/2	0.75
ME 304	Heat and Mass Transfer Sessional	3/2	0.75
ME 372 *	Industrial Training	4 weeks	1.00
Total:		**23.5 + 04 Weeks**	20.75

*It will be conducted after the completion of Level- 3, at any convenient time as can be arranged by the Department.

LEVEL- 4, TERM-I

Course Code	Course Name	Contact Hour	Credit Hour
ME 421	Fluid Machinery	3	3
ME 431	Machine Tools	3	3
ME 401	Internal Combustion Engines	3	3
Optional I[2]	Selected from prescribed optional subjects	3	3
Optional II[2]	Selected from prescribed optional subjects	3	3
ME 422	Fluid Machinery Sessional	3/2	0.75
ME 432	Machine Tools Sessional	3/2	0.75
ME 402	Heat Engines Sessional	3/2	0.75
ME 400	Project and Thesis – 1	6	3
Total:		**25.5**	**20.25**

LEVEL- 4, TERM – II

Course Code	Course Name	Contact Hour	Credit Hour
ME 403	Power Plant Engineering	3	3
Optional III[2]	Selected from prescribed optional subjects	3	3
Optional IV[2]	Selected from prescribed optional subjects	3	3
Optional V[2]	Selected from prescribed optional subjects	3	3
ME 481	Industrial Management	4	4
ME 404	Steam Laboratories Sessional	3/2	0.75
ME 400	Project and thesis – II	6	3
Total:		**23.5**	**19.75**

Notes:

1. Students can choose from a number of humanities courses as follows, offered by Humanities Department:
   - Hum 201: Sociology
   - Hum 203: Government
   - Hum 213: Principles of Accounting.
   - Hum 223: Economics
   - Hum 227: Industrial Sociology
2. Students can choose from optional courses offered by the Department of Mechanical Engineering.

AERONAUTICAL ENGINEERING

Total Credit Hours: 160.75

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

Course Code	Course Name	Contact Hour	Credit Hour
Phy 115	Physics I (Waves and Oscillation, Optics and Thermal Physics)	3	3
AEAV 101	Electrical Circuit Analysis-I	3	3
Math 121	Math I (Differential and Integral Calculus)	3	3
Math 123	Math II (Complex Variables and Vector Analysis)	3	3
AEAS 101	Introduction to Aeronautical Engineering	3	3
Phy 116	Physics Sessional	3	1.5
AEAV 102	Electrical Circuit Analysis-I Sessional	3	1.5
AEAS 110	Aeronautical Engineering Drawing-1	3	1.5
AEAS 108	Workshop Technology Sessional -I	3/2	0.75
	Total:	**25.5**	**20.25**

LEVEL-2, TERM-I (Avionics)

Course Code	Course Name	Contact Hour	Credit Hour
AEAV 201	Electrical Circuit Analysis-II	3	3
AEAS 201	Engineering Mechanics (Statics and Dynamics)	4	4
AEAV 203	Electronics – I	3	3
AEAV 205	Numerical Analysis and Applications	3	3
Math 221	Math IV (Matrices, Coordinate Geometry and Harmonic Functions)	3	3
HumXXX	Select form the prescribed courses (XXX)	3	3
AEAV 202	Electrical Circuit Analysis-II Sessional	1.5	0.75
AEAV 206	Numerical Analysis and Applications Sessional	3.0	1.5
	Total:	**23.5**	**21.25**

LEVEL 1, TERM-II (Aerospace and Avionics)

Course Code	Course Name	Contact Hour	Credit Hour
Phy 117	Phy II (Electricity and Magnetism, Modern Physics and Mechanics)	3	3
Chem 105	Chemistry (Atomic Structure, Thermo-chemistry and Chemistry of Engineering Materials)	4	4
Math 125	Math III (Ordinary and Partial Differential Equations and Laplace Transforms)	3	3
AEAV 103	Computer Programming and Applications	3	3
Hum 111	English	3	3
Hum 112	Technical Report Writing and Presentation	3	1.5
Chem 106	Chemistry Sessional	3	1.5
AEAV 104	Computer Programming and Applications Sessional	3	1.5
AEAS 112	Workshop Technology Sessional -II	3/2	0.75
	Total:	**26.5**	**21.25**

LEVEL-2, TERM-II (Aerospace)

Course Code	Course Name	Contact Hour	Credit Hour
AEAS-203	Fundamentals of Fluid Mechanics	3	3
AEAS-205	Mechanics of Solids	3	3
AEAS-207	Thermodynamics	3	3
Math-225	Math V (Fourier Analysis and Statistics)	3	3
HUM YYY	Select from prescribed courses	3	3
AEAS-206	Mechanics of Solids Sessional	3	1.5
AEAS-208	Thermodynamics Sessional	1.5	0.75
AEAS-210	Aeronautical Engineering Drawing-II	3	1.5
	Total:	**22.5**	**18.75**

LEVEL-2, TERM-I (Aerospace)

Course Code	Course Name	Contact Hour	Credit Hour
AEAS-201	Engineering Mechanics (Statics and Dynamics)	4	4
AEAV-205	Numerical Analysis and Application	3	3
AEAV 211	Fundamentals of Electronics	4	4
Math-221	Math IV (Matrices, Coordinate Geometry and Harmonic Analysis)	3	3
HUM XXX	Select from prescribed courses	3	3
AEAV-206	Numerical Analysis and Application Sessional	3	1.5
AEAV-212	Fundamentals of Electronics Sessional	1.50	0.75
	Total:	**21.5**	**19.25**

LEVEL-2, TERM-II (Avionics)

Course Code	Course Name	Contact Hour	Credit Hour
AEAS 203	Fundamentals of Fluid Mechanics	3	3
AEAV 207	Electronics – II	3	3
AEAV 209	Electro-mechanical System	3	3
AEAS 207	Thermodynamics	3	3
Math 225	Math V (Fourier Analysis and Statistics)	3	3
AEAV 208	Electronics– II Sessional	3	1.5
AEAS 208	Thermodynamics Sessional	1.5	0.75
AEAV 210	Electro-mechanical System Sessional	1.5	0.75
AEAS 210	Aeronautical Engineering Drawing-II	3	1.5
	Total:	**24**	**19.5**

LEVEL-3, TERM-I (Aerospace)

Course Code	Course Name	Contact Hour	Credit Hour
AEAS-301	Heat Transfer	3	3
AEAS-303	Applied Aerodynamics and Computational Fluid Dynamics (CFD)	4	4
AEAS-305	Aerospace Propulsion	4	4
AEAS-307	Aircraft Loading & Structure Analysis	3	3
AEAS-309	Material Science	3	3
AEAS-322	Heat Transfer Sessional	3	1.5
AEAS-324	Applied Aerodynamics and CFD Sessional	3	1.5
AEAS-306	Aerospace Propulsion Sessional	1.5	0.75
AEAS-330	Material Science Sessional	1.5	0.75
	Total:	**26**	**21.5**

LEVEL- 3, TERM – I (Avionics)

Course Code	Course Name	Contact Hour	Credit Hour
AEAV 301	Digital Systems	3	3
AEAV 303	Signals and Systems	3	3
AEAV 305	Communication Engineering	3	3
AEAS 303	Applied Aerodynamics and Computational Fluid Dynamics (CFD)	4	4
HumYYY	Select from the prescribed courses (YYY)	3	3
AEAV 302	Digital Systems Sessional	3	1.5
AEAS 324	Applied Aerodynamics and CFD Sessional	3	1.5
AEAV 306	Communication Engineering Sessional	1.5	0.75
	Total:	**23.5**	**19.75**

LEVEL-3, TERM-II (Aerospace)

Course Code	Course Name	Contact Hour	Credit Hour
AEAS-311	Test and Measurement	3	3
AEAS-313	High Speed Aerodynamics	3	3
AEAS-315	Aerospace Vehicle Stability and Control	3	3
AEAS-317	Mechanics of Structures, Structural Vibration and Aero Elasticity	4	4
AEAS-319	Machine Design	3	3
AE-300	Industrial Training	4 Weeks	1
AEAS-312	Test and Measurement Sessional	1.5	0.75
AEAS-320	Machine Design Sessional	3	1.5
	Total:	**20.5**	**19.25**

LEVEL-3, TERM – II (Avionics)

Course Code	Course Name	Contact Hour	Credit Hour
AEAV-307	Electro-Magnetic Field Theory	3	3
AEAS- 311	Test and Measurement	3	3
AEAV-311	Aero-measurement and Instrumentation	3	3
AEAV-313	Digital Signal Processing	3	3
AEAV-325	Avionics Engineering - I	3	3
AE-300	Industrial Training	4 weeks	1
AEAV- 326	Avionics Engineering - I Sessional	3	1.5
AEAV-312	Aero-measurement and Instrumentation Sessional	3	1.5
AEAV-324	Digital Signal Processing Sessional	3/2	0.75
	Total:	**22.5**	**19.75**

LEVEL-4, TERM-I (Aerospace)

Course Code	Course Name	Contact Hour	Credit Hour
AEAS-401	Computational Structural Analysis	3	3
AEAS-403	Industrial Management	3	3
AEAS-405	Aerospace Vehicle Design	4	4
AEAV-427	Control System	3	3
AEAS-XXX	Select from prescribed optional courses	3	3
AEAS-400	Project and Thesis	6	3
AEAS-406	Aerospace Vehicle Design Sessional	1.5	0.75
AEAS-416	Wind Tunnel Testing Sessional	1.5	0.75
	Total:	**25**	**20.5**

LEVEL-4, TERM – I (Avionics)

Course Code	Course Name	Contact Hour	Credit Hour
AEAV-401	Microwave Engineering	3	3
AEAV-403	Feedback Control System	3	3
AEAS-403	Industrial Management	3	3
AEAS-433	Aerospace Technology	3	3
AEAV-XXX	Selected from prescribed optional courses	3	3
AEAV-400	Project and Thesis	6	3
AEAV-402	Microwave Engineering Sessional	3	1.5
AEAV-404	Feedback Control System Sessional	1.5	0.75
	Total:	**25.5**	**20.25**

LEVEL-4, TERM-II (Aerospace)

Course Code	Course Name	Contact Hour	Credit Hour
AEAS-407	Turbo Machinery	3	3
AEAS-409	Production, Planning and Control	3	3
AEAS-413	Space Engineering	4	4
AEAV-425	Avionics Technology	4	4
AEAS-YYY	Select from prescribed optional courses	3	3
AEAS-400	Project and Thesis	6	3
AEAV-426	Avionics Technology Sessional	1.5	0.75
	Total:	**24.5**	**20.75**

LEVEL- 4, TERM – II (Avionics)

Course Code	Course Name	Contact Hour	Credit Hour
AEAV-405	Avionics Engineering - II	3	3
AEAV-407	Radar Engineering	3	3
AEAV-409	Microprocessor and Interfacing	3	3
AEAS-409	Production, Planning and Control	3	3
AEAV- YYY	Select from prescribed optional courses	3	3
AEAV -400	Project and Thesis	6	3
AEAV-408	Radar Engineering Sessional	1.5	0.75
AEAV-410	Microprocessor and Interfacing Sessional	1.5	0.75
	Total:	**24**	**19.5**

List of Elective Courses to Aerospace Discipline (AEAS/AEAV YYY)

Any two courses (6 Credits) have to be taken from the following courses.

Course Code	Course Name	Level-Term	Contact Hour	Credit Hour
AEAS-417	Air Field Procedure	4-I/4-II	3.0	3.00
AEAS-419	Maintenance Management and Repair of Aircraft	4-I/4-II	3.0	3.00
AEAS-421	Aviation Safety	4-I/4-II	3.0	3.00
AEAS-423	Aerospace Management	4-I/4-II	3.0	3.00
AEAS-425	Pressurization and Air Conditioning systems	4-I/4-II	3.0	3.00
AEAS-427	Noise Control and Vibration	4-I/4-II	3.0	3.00
AEAS-429	Rotorcraft Performance	4-I/4-II	3.0	3.00
AEAS-431	Weapons Engineering	4-I/4-II	3.0	3.00
AEAS 435	Aircraft Structural Design	4-I/4-II	3.0	3.00

List of Elective Courses to Avionics Discipline (AEAS/AEAV XXX)

Any two courses (6.75 Credits) have to be taken by each student from the following list of courses:

Course Code	Course Name	Level-Term	Contact Hour	Credit Hour
AEAS-417	Air Field Procedure	4-I/4-II	3.0	3.00
AEAS-419	Maintenance Management and Repair of Aircraft	4-I/4-II	3.0	3.00
AEAS-421	Aviation Safety	4-I/4-II	3.0	3.00
AEAS-423	Aerospace Management	4-I/4-II	3.0	3.00
AEAV-413	Mobile Cellular Communication	4-I/4-II	3.0	3.00
AEAV-415	Satellite Communication	4-I/4-II	3.0	3.00
AEAV-417	Optoelectronics	4-I/4-II	3.0	3.00
AEAV-419	Electronics Warfare	4-I/4-II	3.0	3.00
AEAV-421	Optical Fiber Communication	4-I/4-II	3.0	3.00
AEAV-423	Digital Communication	4-I/4-II	3.0	3.00
AEAV-435	Computer Networks	4-I/4-II	3.0	3.00
AEAS-417	Air Field Procedure	4-I/4-II	3.0	3.00
AEAS-419	Maintenance Management and Repair of Aircraft	4-I/4-II	3.0	3.00
AEAS-421	Aviation Safety	4-I/4-II	3.0	3.00

NAVAL ARCHITECTURE AND MARINE ENGINEERING

Total Credit Hours: 161.25

Level–1, Term-I

Course Code	Course Name	Contact Hour	Credit Hour
Theoretical Courses			
Chem 101	Chemistry-1	3	3
Hum 101	English	2	2
Math 161	Differential Calculus and Integral Calculus	3	3
NAME 113	Basic Naval Architecture & Marine Engg	3	3
Phy 105	Structure of Matter, Electricity, Magnetism and Modern Physics	3	3
Sessional Courses			
ME 160	Mechanical Engineering Drawing-1	3	1.5
Chem 102	Chemistry Sessional-1	3	1.5
Shop 160	Foundry and Welding Shop Sessional	3	1.5
Shop 170	Machine Shop Sessional	1.5	0.75
	Total (5T+4S)	**24.5**	**19.25**

LEVEL-1, TERM-II

Course Code	Course Name	Contact Hour	Credit Hour
Theoretical Courses			
EECE 181	Electrical Engineering Principles	3	3
Phy 107	Waves and Oscillations, Geometrical Optics and Wave Mechanics	3	3
Math 163	Coordinate Geometry and ordinary Differential Equation	3	3
ME 171	Basic Thermal Engineering	3	3
NAME 125	Hydrostatics and Stability	3	3
Sessional Courses			
NAME 126	Ship Design Studio 1	3	1.5
ME 172	Basic Thermal Engineering Sessional	3	1.5
Phy 108	Physics Sessional	3	1.5
	Total (2T-3S)	**24**	**19.5**

LEVEL-2, TERM-I

Course Code	Course Name	Contact Hour	Credit Hour
Theoretical Courses			
ME 213	Fluid Mechanics	3	3
Math 261	Vector Analysis and Differential Equation (Special Types)	3	3
NAME 215	Shipbuilding Materials	3	3
NAME 217	Marine Engines and Fuels	3	3
ME 219	Engineering Mechanics	3	3
Sessional Courses			
ME 214	Fluid Mechanics Sessional	3	1.5
NAME 216	Shipbuilding Materials Sessional	1.5	0.75
NAME 218	Ship Design Studio - II	3	1.5
Hum 202	English Sessional	1.5	0.75
	Total (5T+4S)	**24**	**19.5**

LEVEL- 2, TERM- II

Course Code	Course Name	Contact Hour	Credit Hour
Theoretical Courses			
Hum 223	Economics	3	3
EECE 281	Electrical and Electronic Technology for Marine Application	3	3
Math 263	Statistics, Partial Differential Equation and Matrices	3	3
NAME 223	Marine Hydrodynamics	3	3
ME 227	Mechanics of Structure	3	3
Sessional Courses			
EECE 282	Electrical and Electronic Technology for Marine Engineering Sessional	3	1.5
NAME 224	Marine Hydrodynamics Sessional	3	1.5
NAME 226	Ship Design Laboratory-III	3	1.5
ME 228	Mechanics of Structure Sessional	1.5	0.75
	Total (2T+4S)	**25.5**	**20.25**

LEVEL- 3, TERM- I

Course No.	Course Title	Contact hours	Credit hours
Theoretical Courses			
Hum 313	Principles of Accounting	3	3
NAME 315	Shipbuilding Technology	3	3
NAME 317	Design of Marine Vehicles	3	3
NAME 319	ShipStructure	3	3
Optional Courses (any one **)			
NAME 335	Port and Harbor Engineering	3	3
NAME 353	Sea Waves and Spectral Analysis	3	3
NAME 357	Marine Pollution and Prevention	3	3
NAME 371	Finite Element Method for Ship Structure	3	3
Sessional Courses			
NAME 318	Ship Design Studio IV	3	1.5
NAME 336	Computer Aided design (CAD) -1	3	1.5
NAME 338	Ship Design Project and Presentation	3	1.5
NAME 320	Ship Structure Sessional	1.5	0.75
	Total (5T+4S)	**25.5**	**20.25**

LEVEL- 3, TERM- II

Course No.	Course Title	Contact hours	Credit hours
Theoretical Courses			
Math 361	Fourier Analysis, Harmonic Function, Complex Variable and Lap lace Transforms	4	4
NAME 323	Resistance and Propulsion of Ships	3	3
NAME 325	Marine Engineering 1	3	3
NAME 329	Heat Transfer	3	3
Optional courses (any one)**			
NAME 327	Economic and Social Aspects of Marine Transportation System	3	3
NAME 347	Design of Special Ships	3	3
NAME 363	Computational Fluid Dynamics (CFD)	3	3
Sessional Courses			
NAME 324	Resistance and Propulsion of Ships Sessional	3	1.5
NAME 328	Marine Engineering Sessional-1	3	1.5
NAME 338	Ship Design Project and Presentation	3	1.5
	Total (5T+3S)	**25**	**22**
Training course during vacation			
NAME 300	Shipyard Practice (4 Weeksconsolidated)	3	1.5

* **Shipyard Training course**

LEVEL- 4, TERM- I

Course No.	Course Title	Contact hours	Credit hours
Theoretical Courses			
ME 479	Engineering Management	3	3
NAME 415	Marine Engineering II	3	3
NAME 419	Dynamics of Marine Vehicles	3	3
Optional courses (any two)**			
NAME 439	Ship Vibration	3	3
NAME 455	Computer Aided Ship Production	3	3
NAME 457	Fishing Vessel Technology	3	3
NAME 475	Dredger and Dredging Technology	3	3
NAME 485	Shipbuilding Practice in Bangladesh	3	3
Sessional Courses			
NAME 400	Project and Thesis	6	3
NAME 416	Computer Aided Design (CAD)-II	3	1.5
NAME 436	Computer Programming in Ship Design	3	1.5
	Total (5T+3S)	**27**	**18 + 3 = 21**

LEVEL- 4, TERM- II

Course No.	Course Title	Contact hours	Credit hours
Theoretical Courses			
NAME 425	Navigation and Maritime Regulations	3	3
NAME 427	Marine Systemand Management	3	3
NAME 429	Marine Maintenance and Repair	3	3
Optional courses (any two)**			
NAME 423	Power and Propulsion System	3	3
NAME 449	Shipyard Management	3	3
NAME 447	Design of Inland Waterways Transportation System	3	3
NAME 465	Marine Production and Planning	3	3
NAME 467	Control Engineering	3	3
NAME 469	Ship Performance		
Sessional Courses			
NAME 400	Project and Thesis	6	3
NAME 430	Marine Engineering Sessional	3	1.5
	Total (5T+2S)	**24**	**19.5**

BIOMEDICAL ENGINEERING
TOTAL CREDIT HOURS: 165

Level-1 Term-I

Course Number	Course Name	Contact Hour	Credit Hour
EECE 101	Electrical Circuits I	3.0	3.0
Phy 111	Physics I (Waves and Oscillation, Optics and Thermal Physics)	2.0	2.0
Phy 112	Physics I Laboratory	3.0	1.5
Math 111	Differential and Integral Calculus	2.0	2.0
CE 152	Engineering Drawing	3.0	1.5
Chem101	Chemistry I	3.0	3.0
Chem 114	Inorganic and Quantitative Analysis Laboratory	3.0	1.5
Hum 127	Sociology	2.0	2.0
Hum 135	English	2.0	2.0
Hum 172	Developing English Skills Lab	2.0	1.5
	Total	25.0	20.0

Level-1 Term-II

Course Number	Course Name	Contact Hour	Credit Hour
EECE 110	Electrical Circuits Simulation Laboratory	3.0	1.5
Phy 113	Phy II (Electricity and Magnetism, Modern Physics and Mechanics)	3.0	3.0
Phy 114	Phy II Laboratory	3.0	1.5
Math 115	Vector analysis, Matrices and Geometry	3.0	2.0
CSE 109	Computer Programming	3.0	3.0
CSE 110	Computer Programming Laboratory	3.0	1.5
ME 163	Fundamentals of Mechanical Engineering	3.0	3.0
ME 164	Fundamentals of Mechanical Engineering Laboratory	3.0	1.5
Hum 177	Fundamentals of Economics	2.0	1.5
	Total	**26.0**	**18.5**

Level-2 Term-I

Course Number	Course Name	Contact Hour	Credit Hour
EECE 201	Electronics I	3.0	3.0
EECE 203	Electrical Machines I	3.0	3.0
EECE 206	Electrical Machines laboratory	3.0	1.5
EECE 207	Electronics II	3.0	3.0
EECE 210	Electronic Circuit Simulation Laboratory	3.0	1.5
Math 211	Math (Ordinary and Practical Differential equation)	3.0	3.0
BME 211	Human Anatomy & Physiology	3.0	3.0
BME 213	Medical Instrumentation	3.0	3.0
BME 214	Medical Instrumentation Lab	3.0	1.5
	Total	**27**	**22.5**

Level-2 Term-II

Course Number	Course Name	Contact Hour	Credit Hour
Math 213	Math (Complex Variable & Statistics) (4)	3.0	2.0
BME 221	Dynamics of Biofluids	3.0	3.0
BME 223	Biomechanics	3.0	3.0
BME 224	Bio-engineering and Computation Lab	3.0	1.5
BME 225	Embedded System in Medicine	3.0	3.0
BME 227	Bioinformatics	3.0	3.0
BME 228	Bioinformatics Lab	3.0	1.5
Hum 279	Financial and Managerial Accounting	2.0	1.5
	Total	**23.0**	**18.5**

Level-3 Term-I

Course Number	Course Name	Contact Hour	Credit Hour
EECE 305	Power System I	3.0	3.0
EECE 306	Power System I Lab	3.0	1.5
BME 301	Continuous Signals and Linear Systems	3.0	3.0
BME 303	Digital Electronics	3.0	3.0
BME 304	Digital Electronics Laboratory	3.0	1.5
BME 311	Biomedical Signal Processing	3.0	3.0
BME 312	Biomedical Signal Processing Lab	3.0	1.5
BME 313	Biomedical Instrumentation Measurement	3.0	3.0
	Total	**24.0**	**19.5**

Level-3 Term-II

Course Number	Course Name	Contact Hour	Credit Hour
EECE 309	Communication Theory	3.0	3.0
EECE 310	Communication Laboratory	3.0	1.5
EECE 311	Digital Signal Processing I	3.0	3.0
EECE 312	Digital Signal Processing I Laboratory	3.0	1.5
EECE 315	VLSI-1	3.0	3.0
EECE 316	VLSI-1 Lab	3.0	1.5
BME 321	Hospital Planning and Management	3.0	3.0
BME 323	Principles of Diagnostic and Therapeutic Equip	3.0	3.0
BME 320 **#**	Industrial Training/attachment	¾ weeks	1.5
	Total	**24.0**	**21.0**

BME 320 (Industrial Training/attachment) will be conducted at any convenient time after the term end exam of term-2 for a duration of ¾ weeks as applicable or decided by the department.

Level-4 Term-1

Course Number	Course Name	Contact Hour	Credit Hour
BME 400	Project/ Thesis	6.0	3.0
BME 401	Control System I	3.0	3.0
BME 402	Control System I Laboratory	3.0	1.5
EECE 405	Solid State Devices	3.0	3.0
BME 411	Principles of Imaging and Radiological Equipment	3.0	3.0
BME 412	Biomedical Image Analysis Lab	3.0	1.5
BME 4 **	Elective I	3.0	3.0
BME 4 **	Elective I Lab	3.0	1.5
BME 4 **	Elective II	3.0	3.0
BME 4 **	Elective II Lab	3.0	1.5
	Total	**33**	**24.0**

Level-4 Term-II

Course Number	Course Name	Contact Hour	Credit hour
BME 400	Project/Thesis	6.0	3.0
EECE 407	Microprocessors and Interfacing	3.0	3.0
EECE 408	Microprocessor and Interfacing Lab	3.0	1.5
BME 421	Advanced Biomedical Instrumentation	3.0	3.0
BME 422	Advanced Biomedical Instrumentation Lab	3.0	1.5
BME 4 **	Elective III	3.0	3.0
BME 4 **	Elective III Lab	3.0	1.5
BME 4 **	Elective IV	3.0	3.0
BME 4 **	Elective IV Lab	3.0	1.5
	Total	**30.0**	**21.0**

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NUCLEAR SCIENCE AND ENGINEERING (NSE)
TOTAL CREDIT: 160

Level – 1, Term – I

Course Code	Course Title	Contact Hr	Credit Hr
NSE 101	Introduction to Nuclear Science and Engineering	3	3.0
Phy 151	Structure of Matter, Modern Physics and Wave Mechanics	3	3.0
Math 191	Differential and Integral Calculus	3	3.0
ME 151	Introduction to Thermal Engineering	3	3.0
EECE 119	Fundamental of Electrical Engineering	3	3.0
Phy 152	Physics Sessional	3	1.5
EECE 120	Fundamental of Electrical Engineering Sessional	3/2	0.75
Shop 114	Foundry, Welding and Machine Shop	3	1.5
Total :		22.5	18.75

Level – 1, Term – II

Course Code	Course Title	Contact Hr	Credit Hr
NSE 121	Introduction to Computer Science and Programming	3	3.0
Phy 153	Fundamental of Nuclear Physics	3	3.0
Chem 171	Introduction to Chemistry	3	3.0
Math 193	Differential Equations (ODE &PDE)	3	3.0
Hum 105	English and Communication Skill	3	3.0
NSE 122	Computer Programming Language Sessional	3/2	0.75
ME 180	Basic Engineering Drawing	3	1.5
Chem 172	Inorganic Quantitative Analysis Sessional	3	1.5
Hum 106	English and Communication Skill Sessional	3	1.5
Total:		25.5	20.25

Level – 2, Term – I

Course Code	Course Title	Contact Hr	Credit Hr
NSE 201	Neutron Transport and Reactor Physics	3	3.0
NSE 221	Basic Engineering Thermodynamics	3	3.0
Math 291	Vector Analysis, Matrices and Coordinate Geometry	3	3.0
Chem 273	Introduction to Nuclear and Radio Chemistry	3	3.0
EECE 219	Electronics, Signals and measurement	3	3.0
NSE 222	Basic Engineering Thermodynamics Sessional	3/2	0.75
EECE 220	Electronics, Signals and Measurement Sessional	3	1.5
Chem 274	Nuclear and Radio Chemistry Lab	3/2	0.75
Hum1	Select from the prescribed courses	3/2	0.75
		22.5	18.75

[1] Students can choose from a number of humanities courses as follows, offered by Humanities Dept:

Hum 252 : Introduction to Russian Language-I
Hum 262 : Introduction to German Language-I
Hum 272 : Introduction to Japanese Language-I

Level – 2, Term – II

Course Code	Course Title	Contact Hr	Credit Hr
NSE 261	Numerical Methods in Nuclear Engineering Analysis	3	3.0
NSE 291	Material Science for Nuclear	3	3.0
ME 253	Engineering Mechanics	3	3.0
Math 293	Fourier Analysis, Harmonic functions, Laplace Transform and Complex variable	4	4.0
Hum 207	Principle of Accounting	3	3.0
NSE 262	Modeling and Simulation sessional	3	1.5
NSE 292	Material Science for Nuclear Sessional	3	1.5
ME 254	Engineering Mechanics Sessional	3/2	0.75
Hum2	Select from the prescribed courses	3/2	0.75
		25	20.5

[2] Students can choose from a number of humanities courses as follows, offered by Humanities Dept:

Hum 254 : Introduction to Russian Language-II
Hum 264 : Introduction to German Language-II
Hum 274 : Introduction to Japanese Language-II

Level – 3, Term – I

Course Code	Course Title	Contact Hr	Credit Hr
NSE 305	Nuclear Reactor Thermal Hydraulics	3	3.0
NSE 307	Health Physics	3	3.0
NSE 309	Nuclear Fuel Cycle and Radioactive Waste Management	3	3.0
NSE 311	Nuclear Electronics, Instrumentation and Measurement	3	3.0
ME 353	Mechanics of Solids	3	3.0
Hum 305	Economics for Engineers	2	2.0
NSE 306	Nuclear Reactor Thermal Hydraulics Sessional	3/2	0.75
NSE 308	Health Physics-Sessional	3/2	0.75
ME 354	Mechanics of Solids Sessional	3/2	0.75
NSE 312	Nuclear Electronics, Instrumentation and Measurement-Sessional	3/2	0.75
		23	20

Level – 3, Term – II

Course Code	Course Title	Contact Hr	Credit Hr
NSE 325	Fluid Mechanics and Machinery	3	3.0
NSE 329	Reactor Operation and Safety	3	3.0
NSE 331	Nuclear Chemical Engineering and Corrosion	3	3.0
NSE 357	Nuclear Security and Safeguard Engineering	3	3.0
NSE 373	Measurement and Quality Control	3	3.0
NSE 326	Fluid Mechanics and Machinery Sessional	3/2	0.75
NSE 332	Nuclear Chemical Engineering and Corrosion Sessional	3/2	0.75
NSE 374	Project Design	3	1.5
NSE 310	Nuclear Related Training	4 Weeks	1.0
		21.5+4 Weeks	19

Level – 4, Term – I

Course Code	Course Title	Contact Hr	Credit Hr
NSE 411	Nuclear Power Plant Engineering	3	3.0
NSE 415	Environmental Monitoring of NPPs	3	3.0
NSE 425	Non Destructive Testing and Machine Condition Monitoring	3	3.0
NSE 469	OPC-1	3	3.0
ME 497	Industrial Management	3	3.0
NSE 412	Nuclear Power Plant Simulators-Sessional	3	1.5
NSE 426	Non Destructive Testing and Machine Condition Monitoring Sessional	3	1.5
NSE400	Project and Thesis-I	6	3.0
		27	21

Level – 4, Term – II

Course Code	Course Title	Contact Hr	Credit Hr
NSE415	Biomedical Radiation Physics	3	3.0
NSE 413	Nuclear Reactors Design and Features	3	3.0
NSE 415	Nuclear Accidents Analysis and Disaster Management	3	3.0
NSE 419	OPC-2	3	3.0
NSE 412	OPC-3	3	3.0
		15.0	15.0
NSE 416	Biomedical Radiation Physics Sessional	3	1.5
NSE 400	Project and Thesis -II	6	3.0
	Total :	24	19.5

ENVIRONMENTAL, WATER RESOURCES AND COASTAL ENGINEERING
TOTAL CREDIT: 162

Level – 1, Term – 1

Course Code	Course Title	Contact Hour	Credit Hour
PHY-101	Physics	3	3
PHY-102	Physics lab.	3	1.5
CHEM-103	Chemistry	3	3
CHEM-114	Chemistry lab.	3	1.5
MATH-131	Mathematics-I	3	3
EWC-	Introduction to Environment and Water resource	3	3
CE-101	Analytical Mechanics	3	3
CE-100	Engineering Drawing	3	1.5
Total:		24	19.5

Level – 1, Term – 2

Course Code	Course Title	Contact Hour	Credit Hour
CE-105	Mechanics of Solids	3	3
HUM-111	English	2	2
HUM-112	Advance English	3	1.5
EWC-	Water and Waste Water Engineering	3	3
MATH-133	Mathematics-II	3	3
CE-102	Computer Aided Drafting	3	1.5
CE-103	Surveying	3	3
CE-104	Practical surveying	3 weeks	1.5
EWC-	Workshop Practice	3	1.5
	Total:	23	20

Level – 2, Term – 1

Course Code	Course Title	Contact Hour	Credit Hour
MATH-231	Mathematics-III	3	3
CE-201	Structural Analysis and Design	4	4
EWC-	Fluid Mechanics	3	3
EWC-	Fluid Mechanics Sessional	3	1.5
EWC-	Numerical Methods and Computer Programming	3	3
EWC-	Matlab for Engineering Analysis	3	1.5
CE-	Construction Materials	3	3
EWC-	Constructional material	3	1.5
	Total:	22	20.5

Level – 2, Term – 2

Course Code	Course Title	Contact Hour	Credit Hour
EWC-	Open Channel Hydraulics	4	4
EWC-	Open Channel Hydraulics Sessional	3	1.5
EWC-	Environmental Pollution and its Control	3	3
MATH-241	Mathematics-IV	3	3
EWC-	Environmental Engineering Lab	3	1.5
HUM-207	Economics/Accounting	2	2
EWC-	GIS and Remote Sensing	3	3
EWC-	GIS Sessional	3	1.5
	Total:	24	19.5

Level – 3, Term – 1

Course Code	Course Title	Contact Hour	Credit Hour
EWC-	Design of Concrete Structures	4	4
EWC-	Structural analysis and design	3	1.5
EWC-	Design of Coastal Structures	4	4
EWC-	Coastal Engineering Lab	3	1.5
EWC-	Solid and Hazardous Waste Management	3	3
EWC-	Engineering Hydrology	3	3
EWC-	Dredging and Beach Engineering	3	3
EWC-	Estimating and Cost Analysis	3	1.5
	Total:	25	21.5

Level – 3, Term – 2

Course Code	Course Title	Contact Hour	Credit Hour
EWC-	Principles of Soil Mechanics	4	4
EWC-	Geotech sessional	3	1.5
EWC-	Environmental modeling and EIA	4	4
EWC-	Environmental Modeling Lab	3	1.5
EWC-	River Engineering and Flood Mitigation	3	3
EWC-	Marine Renewable Energy	3	3
EWC-	Professional Practices and Communication	3	3
EWC-	Industrial Training	3	1.5
	Total-	26	21.5

Level – 4, Term – 1

Course Code	Course Title	Contact Hour	Credit Hour
EWC-	Foundation Engineering	3	3
EWC-	Sediment Transport and Coastal Morphology	3	3
EWC-	Coastal Engineering Lab	3	1.5
EWC-	Optional-1	2	2
EWC-	Optional-2	2	2
EWC-	Project Planning and Construction Management	3	3
CE-400	Thesis	3	1.5
EWC-	Coastal Structure Design Lab	3	1.5
EWC-	Optional Lab-1	3	1.5
	Total:	25	19

Level – 4, Term – 2

Course Code	Course Title	Contact Hour	Credit Hour
EWC-	Environmental Chemistry	3	3
EWC-	Water Supply and Sewage Engineering Lab	3	1.5
EWC-	Optional-1	2	2
EWC-	Optional-2	2	2
EWC-	Design of Hydraulic Structures	3	1.5
CE-400	Thesis	6	3
EWC-	Irrigation and Drainage Engineering	3	3
EWC-	Near Shore Hydrodynamics	3	3
EWC-	Optional Lab-1	3	1.5
	Total:	28	20.5

DEPARTMENT OF ARCHITECTURE
TOTAL CREDIT: 204

Level – 1, Term – 1

Course Code	Course Title	Contact Hour	Credit Hour
Arch 102	Design Studio I	9.0	4.5
Arch 112	Architectural Graphics I	6.0	3.0
Arch 122	Computer Application I	3.0	1.5
Arch 141	Art and Architecture I	2.0	2.0
Arch 151	Design Theory I	2.0	2.0
Arch 145	Architecture of Bengal	2.0	2.0
Hum 111	English	2.0	2.0
Phy 111	Physics for Architects	1.0	1.0
Math 111	Mathematics	1.0	1.0
	Total:	**28**	**19**

Level – 1, Term – 2

Course Code	Course Title	Contact Hour	Credit Hour
Arch 104	Design Studio II	9.0	4.5
Arch 114	Architectural Graphics II	6.0	3.0
Arch 124	Computer Application II	3.0	1.5
Arch 143	Art and Architecture II	2.0	2.0
Arch 153	Design Theory II	2.0	2.0
Arch 131	Environmental Design I: Climate and Environment	2.0	2.0
Arch 161	Building & Finish Materials	2.0	2.0
Hum 113	Sociology for Architects	2.0	2.0
	Total:	**28**	**19**

Level – 2, Term – 1

Course Code	Course Title	Contact Hour	Credit Hour
Arch 202	Design Studio III	9.0	6.0
Arch 212	Graphic Art & Sculpture	6.0	3.0
Arch 241	Art and Architecture III	2.0	2.0
Hum 211	Logic and Philosophy	2.0	2.0
Arch 231	Environmental Design II: Visual & Sonic Environment	2.0	2.0
Arch 233	Basic Planning	2.0	2.0
CE 211	Structure I: Mechanics	2.0	2.0
	Total:	**25**	**19**

Level – 2, Term – 2

Course Code	Course Title	Contact Hour	Credit Hour
Arch 204	Design Studio IV	9.0	6.0
Arch 214	Photography and Film	3.0	1.5
Arch 243	Art and Architecture IV	2.0	2.0
Arch 237	Military, Air and Naval Architecture	2.0	2.0
Elective	Elective Subjects	2.0	2.0
CE 213	Structure II: Basic Mechanics of solid	2.0	2.0
CE 215	Building Services I: Plumbing	2.0	2.0
Hum215	Psychology & Behavior	2.0	2.0
	Total	**24**	**19.5**

Elective Subjects

Course Code	Course Title	Contact Hour	Credit Hour
Arch 235 Eltv-I	Environmental Design III: Design in the Tropics	2.0	2.0
Arch 239 Eltv-II	Green & Sustainable architecture	2.0	2.0

Level – 3, Term – 1

Course Code	Course Title	Contact Hour	Credit Hour
Arch 302	Design Studio V	12.0	8.0
Arch 312	Working Drawing I: Construction Drawing	3.0	1.5
Arch 341	Art and Architecture V	2.0	2.0
Arch 331	Advanced Construction & Building Technology	2.0	2.0
Arch 351	Construction Method & Details	4.0	2.0
CE 311	Structure III: Mechanics of Solid	2.0	2.0
ME 311	Building Services II: Mechanical Equipment	2.0	2.0
	Total:	**27**	**19.5**

Level – 3, Term – 2

Course Code	Course Title	Contact Hour	Credit Hour
Arch 304	Design Studio VI	12.0	8.0
Arch 314	Working Drawing II: Production Drawing	3.0	1.5
Arch 343	Art and Architecture VI	2.0	2.0
Arch 333	Urban Design	2.0	2.0
Arch 353	Interior Design	2.0	2.0
Elective	Elective Subjects	2.0	2.0
CE 313	Structure IV: Steel & Timber structure	2.0	2.0
EE 311	Building Services II: Electrical Equipment	2.0	2.0
		27	**21.5**

Elective Subjects

Course Code	Course Title	Contact Hour	Credit Hour
Arch 353 Eltv-I	Cost Estimation & Specification	2.0	2.0
Hum 313 Eltv-I	Economics for Architects	2.0	2.0

Level – 4, Term – 1

Course Code	Course Title	Contact Hour	Credit Hour
Arch 402	Design Studio VII	15.0	10.0
Arch 412	Interior Design Studio	3.0	1.5
Arch 451	Advanced Planning	2.0	2.0
Arch 431	Environmental Design IV: Landscape Design	2.0	2.0
Elective		2.0	2.0
Arch 461	Housing	2.0	2.0
CE 411	Structure V: Reinforced Concrete Design	2.0	2.0
		28	21.5

Elective Subjects

Course Code	Course Title	Contact Hour	Credit Hour
Arch 435 Eltv-I	Urban Anthropology	2.0	2.0
Arch 437 Eltv-II	Rural Planning	2.0	2.0

Level – 4, Term – 2

Course Code	Course Title	Contact Hour	Credit Hour
Arch 404	Design Studio VIII	15.0	10.0
Arch 414	Landscape Design Studio	3.0	1.5
Elective		2.0	2.0
Hum 413	Project Management for Architects	2.0	2.0
Arch 453	Spaces & Forms in architecture	2.0	2.0
Arch 463	Architecture in Extreme Environments	2.0	2.0
CE 413	Structure VI: Elements of Building Structure	2.0	2.0
	Total:	28	21.5

Elective Subjects

Course Code	Course Title	Contact Hour	Credit Hour
Arch 443 Eltv-I	Architectural Conservation	2.0	2.0
Arch 433 Eltv-II	Contemporary Architectural Theories	2.0	2.0

Level – 5 Term – 1

Course Code	Course Title	Contact Hour	Credit Hour
Arch 502	Design Studio IX	15.0	10.0
Arch 541	Architecture and Society	2.0	2.0
Elective		2.0	2.0
Arch 600	Professional Training	-	-
Arch 512	Survey Technique & Analytical Method	2.0	2.0
Arch 522	Seminar	3.0	2.0
Arch 571	Art and Music appreciation	2.0	2.0
	Total:	26.0	21.5

Elective Subjects

Course Code	Course Title	Contact Hour	Credit Hour
Arch 551	Industrial & Commercial Building Design & Planning	2.0	2.0
Arch 553	Health Facilities Planning & Design	2.0	2.0
Arch 553	Educational, Religious & Recreational Facilities Design	2.0	2.0

Level – 5, Term – 2

Course Code	Course Title	Contact Hour	Credit Hour
Arch 504	Design Studio X	18.0	12.0
Arch 506	Design Studio X Alternative to Arch 504 Design Studio X (Thesis)	18.0	
Arch 555	Modular Architecture, Production Line & Customization	2.0	2.0
Arch 575	Research Methodology	2.0	2.0
Arch 524	Dissertation	2.0	2.0
Arch 526	Construction Documents Alternative to Arch 524: Dissertation	2.0	
Arch 573	Professional Practice	2.0	2.0
	Total:	**28**	**20**

IMPORTANT CONTACT NUMBERS

Admission Officer:

Mobile: 01556-565566, 01769-023896

Telephone: 8000266

Fax: 88-02-9011311