

THE ORDINANCES  
FOR  
UNDERGRADUATE PROGRAMMES

BTech, BArch and  
Dual Degree BTech – MTech Programmes

FROM 2019 ADMISSION ONWARDS



July 2019

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The provisions contained in these ordinances govern the policies and procedures on the admission of students, imparting instructions of courses, conducting of examinations and evaluation and certification of student's performance.

These ordinances, on approval by the Board of Governors, shall be applicable to the students taking admission in 2019 and onwards.

For students admitted in earlier years, these ordinances are also applicable wherever eligible. But such applications shall be dealt with appropriately and carefully, so as to ensure that these students are not subjected to any unfair situation whatsoever. In case of any conflict with the present regulations and earlier regulations, rules those are in favour of these students shall be applicable.

# The Ordinances for Undergraduate Programmes

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## 1 Introductory

In exercise of the powers conferred by section 28 of the National Institutes of Technology, Science Education and Research Act, 2007 (29 of 2007), the Senate of the Indian Institute of Engineering Science and Technology, Shibpur, hereby frames the following Ordinances for the conduct and regulation of undergraduate programmes of the Institute and for matters connected therewith.

### 1.1 Short Title and Commencement

- 1) These Ordinances may be called the Ordinances for Undergraduate Programmes, 2019.
- 2) These shall come into force on such date as the Chairman, Senate, may appoint and different dates may be appointed for different provisions of these Ordinances and for different programmes.

### 1.2 Application

These Ordinances shall apply to the following programmes of the Institute:

- 1) Bachelor of Technology programme offered in the following branches of study –
  - a) Aerospace Engineering,
  - b) Civil Engineering,
  - c) Computer Science and Technology,
  - d) Electrical Engineering,
  - e) Electronics and Telecommunication Engineering,
  - f) Information Technology,
  - g) Mechanical Engineering,
  - h) Metallurgy and Materials Engineering, and
  - i) Mining Engineering.
- 2) Bachelor of Architecture programme;
- 3) Dual (BTech-MTech) Degree Programme; and
- 4) Any other programme to which the Senate, through a resolution, decides to apply these Ordinances.

### 1.3 Definitions

- 1) In these Ordinances, unless the context otherwise requires: -

**Academic Session** means academic session of the Institute Referred to in section 8 of these Ordinances;

**Act** means the National Institutes of Technology, Science Education and Research Act, 2007;

**Authorities, Officers and Faculty Members**, in relation to the Institute, respectively mean, the authorities, officers and faculty members of the Institute;

**Board** means the Board of Governors of the Institute;

**Central Government** means the Government of India;

**Department or School or Centre** means an Academic Department or School or Centre, as the case may be, established to impart instruction or for carrying out or facilitating the academic and research activities relating to any particular area or discipline or areas of inter-disciplinary nature;

**Director** means the Director of the Institute referred to under Statute 17 of the Statutes;

**Head or Chair** in relation to a Department or School or Centre, as the Case may be, means the Head thereof;

**Institute** means the Indian Institute of Engineering Science and Technology, Shibpur;

**Notification** means any notification published under the authority of the Senate and includes all such notifications published under these Ordinances;

**Ordinances** means These Ordinances, i.e., The Ordinances for Undergraduate Programmes, 2019

**Programme** means an academic programme of the Institute;

**Regulations** and **bye-laws** means respectively regulations and byelaws made under these Ordinances.

**Rules** means the rules made under the Act;

**Senate** means the Senate of the Institute referred to under Statute 7 of the Statutes;

**Statutes** means the Statutes of the Indian Institute of Engineering Science and Technology, Shibpur, 2017 and shall include all the amendments made thereto;

**Student** means a student of the Institute pursuing any of the programmes to which these Ordinances apply.

- 2) Unless repugnant to the context, all other terms used in these Ordinances shall have the same meaning as defined in the Act and/ or Statutes.

## 1.4 Abbreviations and Acronyms

In these Ordinances the following abbreviations and acronyms have been used to mean the expression mentioned against each of them:

- a) BArch Bachelor of Architecture
- b) BoAc Board of Academics
- c) BTech Bachelor of Technology
- d) DD Dual Degree (BTech – MTech)
- e) DUGC Department Undergraduate Committee
- f) MTech Master of Technology
- g) SUGC Senate Undergraduate Committee
- h) UG Undergraduate
- i) MHRD Ministry of Human Resources Development

## 2 Power of the Senate

### 2.1 To Take Measures for Conduct and Regulation of the UG Programmes

- 1) Subject to the provisions of these Ordinances, the Senate shall have the power to take all such measures as it deems necessary or expedient for the purpose of conducting and regulating the undergraduate programmes of the Institute.

- 2) The Senate may, if it considers it necessary or expedient so to do for the purpose of these Ordinances, by a resolution adopted in a meeting of the Senate, constitute a standing committee or committees by such name or names as may be specified in the resolution, for the purpose of exercising and performing such of the powers and functions (including the power to issue directions) of the Senate under these Ordinances and for taking measures with respect to such of the matters referred to in sub-section (2) as may be mentioned in the resolution and subject to the supervision and control of the Senate and the provisions of such resolution, such standing-committee or standing-committees may exercise the powers or perform the functions or take the measures so mentioned in the resolution as if such standing-committee or standing-committees had been empowered by these Ordinances to exercise those powers or perform those functions or take such measures.

## **2.2 To Make Regulations**

- 1) For conduct and Regulations of the programmes mentioned in sub-section (1.2) of these Ordinances, the Senate may make regulations consistent with these Ordinances for all or any of the following purposes, namely -
  - a) the admission of the students to any or all of the programmes mentioned in sub-section (1.2) of these Ordinances;
  - b) the courses of study to be laid down for the programmes mentioned in sub-section (1.2) of these Ordinances;
  - c) the conditions under which students shall be admitted to the degree programmes mentioned in sub-section (1.2) of these Ordinances and to the examinations of the Institute, and shall be eligible for degrees and diplomas;
  - d) the conditions of award of the fellowships, scholarships, exhibitions, medals and prizes;
  - e) the conditions and mode of appointment and duties of examining bodies, examiners and moderators;
  - f) the conduct of examinations;
  - g) the maintenance of discipline among the students of the Institute; and
  - h) any other matter which by the Act or the Statutes is to be or may be provided for by the Ordinances.

## **3 Programmes**

- 1) The Institute shall provide Programmes leading to Bachelor's Degree in different branches of Engineering, Technology, and in Architecture, and in such other branches of study as may be instituted by the Board on its own initiative or on the recommendations of the Senate;
- 2) The Institute may introduce new programmes.
  - a) In every such case, the Senate, after examining each proposal for introduction of a new course from the point of view of its viability and desirability in the light of broad goals as set forth in the Act and the Statutes, shall make suitable recommendations to the Board.
  - b) The recommendations of the Senate on each proposal for introduction of a new course shall be considered by the Board for possible introduction of the course.
- 3) For every programme, whether existing or new -
  - a) The minimum admission standards, admission procedure and the duration of each course, shall be approved by the Senate.

- b) The curriculum of each course, required for its successful completion, shall require prior approval of the Senate. Any change in the approved curriculum of any existing Programme shall also require prior approval of the Senate.
- 4) The Senate shall approve the format of each Degree to be awarded to a student after successful completion of the Programme. Any revision in the format of a Degree shall also require approval of the Senate.
- 5) The Institute may, also, from time to time provide short-term and part-time courses in subjects of scientific, technological and professional interest.

## 4 Academic Calendar

- 1) The Academic Session shall normally commence in the middle of July every year. Each Academic Session shall consist of two regular semesters and a Summer-Term. Each regular semester shall normally consist of about fifteen working weeks including two weeks of examination period. The Summer-Term shall consist of about eight working weeks including the examination period.
- 2) The dates for the important academic events scheduled during the Academic Session shall be specified in the Academic Calendar. In particular, the dates for the following events shall be specified: Orientation, Registration, Late Registration, Commencement of Classes, Examinations, Supplementary Examinations, Submission, Conversion and Authentication of Marks/Grades, and Vacations.
- 3) The Academic Calendar, or any change therein during the session, shall require prior approval of the Senate.

## 5 Admissions

- 1) Admission to the Institute shall be open to students, irrespective of sex, race, creed, caste or class, provided they satisfy the minimum educational and other requirements as prescribed in the regulations.
- 2) The Senate shall appoint each year Admission Committees for admission of students to the undergraduate and postgraduate courses.
- 3) Admission to the undergraduate courses shall ordinarily be made at the beginning of the academic session.
- 4) The number of admissions (seats) that can be made to any approved programme of the Institute shall be as decided by the Senate from time to time. Reservation of seats for various reserved categories shall be as prescribed by the MHRD.
- 5) The Admission of Indian Nationals to the BTech programmes shall be made once a year on the basis of the Joint Entrance Examination (JEE - Main). For foreign students, a few admissions will be offered under the Cultural Exchange Fellowship Programme of the Government of India and through DASA.
- 6) Students admitted to the B. Tech. courses shall normally pursue the courses initially allocated to them at the time of admission. However, the Senate may permit a limited number of students to change their courses as per the "Change of Branch Rules" laid down by the Senate.
- 7) Some students of the BTech programme may opt for a Dual Degree programme or include minors in the existing programme as per rules and procedures laid down by the Senate.
- 8) Every student, admitted provisionally or otherwise to any course of the Institute, shall submit copies of the qualifying degree / provisional certificate and such other documents as prescribed by the Senate. These documents must be submitted by the prescribed date. The admission, provisional or otherwise,

of any student who either does not submit the required documents by the stipulated date or fails to meet any other stipulated requirement for admission can be cancelled by the Senate.

- 9) The admission of any student may also be cancelled by the Senate, at any later time, if it is found that the student had supplied some false information or suppressed some relevant information while seeking admission.
- 10) The Chairman of the Senate may admit students for short-term and part-time courses as may be offered from time to time on the recommendation of the Committees set up to organize such courses.

## **6 Registration**

- 1) The Senate shall lay down norms for registration of students.
  - a) Before the commencement of each semester, every student, unless otherwise exempted by the Senate, shall register for the prescribed courses to be pursued during that semester on the registration date as specified in the Academic Calendar. The registration for Summer-Term shall be subject to the conditions that may be laid down by the Senate.
  - b) Payment of prescribed semester / summer-term fees, and all other dues outstanding against the name of the student to the Institute shall ordinarily be a pre-condition for registration.
  - c) For bonafide reasons, students may be permitted to register late in a semester/summer-term on the date so prescribed in the Academic Calendar on payment of prescribed late registration fee. The Senate shall lay down the conditions and procedure for such late registration. Any other exceptional case of registration requires approval of the Senate.
  - d) The registration of any student may be cancelled or changed during the semester/summer-term, partly or wholly, according to the norms laid down by the Senate.
  - e) A letter grade shall be awarded in a course to a student only if the student is duly registered in the course at the time of the award of the letter grade.

## **7 Leave of Absence**

- 1) Absence during the semester shall be discouraged for all registered students. However, for bonafide reasons, a student may be granted leave of absence as per provisions made by the Senate for such absence.
- 2) Undergraduate students shall be entitled to avail the vacations as provided in the Academic Calendar. In addition, the Undergraduate students may be allowed leave of absence during a semester, as per rules and procedures laid down by the Senate.
- 3) Without prejudice to the provision made for leave of absence in the Ordinances, unauthorized absence (i.e., absence without due permission) for a period of four or more weeks at a stretch, during a semester, shall result in automatic cancellation of the registration of students from the course(s) in that semester.
- 4) Students are expected to complete their Course of Study without any break. However, for bonafide reasons, Senate may grant leave of absence from the Course of Study. But such absence(s) shall ordinarily not exceed two semesters with or without break.

## **8 Duration and Academic Requirements**

- 1) The Senate shall prescribe the minimum duration for all approved Programmes. The Senate shall also prescribe the maximum duration within which each Programme must be completed.
- 2) All approved Degree courses are credits based. The Senate shall prescribe the minimum credits requirements through coursework and/or project work.



- 3) The Senate shall prescribe the structure of courses to be successfully completed in all Bachelor's Degree and Dual Degree courses.

## 9 Teaching and Evaluation

- 1) The medium of instruction, examination and evaluation shall be the English Language.
- 2) Each course, along with its credits, shall require approval of the Senate. Only approved courses can be offered during any semester / summer-term.
- 3) The list of all courses to be offered by a department, during any semester/summer-term, shall be finalized, before the beginning of the semester/summer-term, by the concerned Head of the Department, taking into consideration all the departmental requirements and shall be approved by the Senate.
- 4) The Teachers and Instructors for all the courses to be offered by a Department, during any semester/summer-term shall be assigned by the concerned Head of Department.
- 5) Students registered in courses shall be continuously evaluated through examinations, quizzes, class-tests, viva, project, presentation, assignment etc.
- 6) For the regular full semester courses, there shall normally be one Mid-Semester Examination and one End-Semester Examination.
- 7) Students who fail to appear in any End-Semester examination, due to bonafide reasons, may be permitted to appear in the Supplementary Examination as per the procedures laid down by the Senate.
- 8) Students who fail to appear in any Mid-Semester examination, due to bonafide reasons, may be permitted to appear in make-up Examination as per the decision of the teacher of the concerned course.
- 9) Each student, registered for a course, shall be awarded a letter grade. The grade awarded to a student depends upon his/her performance in various examinations, assignments, class tests, presentations, laboratory work etc. The letter grades to be used and their numerical equivalents will be decided by the Senate.
- 10) The academic performance of a student in any given semester shall be measured in terms of the Semester Grade Point Average (SGPA). The SGPA is the weighted average of the grade points, the weights being the course credits.
- 11) The Cumulative Grade Point Average (CGPA) in a semester is computed in a manner similar to the computation of SGPA from the grade points of all the grades that a student has received up to that semester in the Programme.

## 10 Conduct and Discipline

- 1) Each student shall conduct himself/ herself, both within and outside the campus of the Institute, in a manner befitting a student of an Institute of National importance. No student is expected to indulge in any activity which tends to bring down the prestige of the Institute. Each student shall show due respect and courtesy to the teachers, administrators, officers and employees of the Institute; and, good neighbourly behaviour to fellow students. They should also pay due attention and courtesy to the visitors and residents of the campus.
- 2) Without prejudice to the general requirements of conduct and discipline stipulated in subsection (1) above, every student shall conduct herself/ himself within and outside the precincts of the Institute in a manner befitting the students of the Institute and shall abide by the 'code of conduct for students' framed by the Senate.

- 3) Violation of the 'code of conduct for students' by any student, shall invite disciplinary action and may merit punishment, such as reprimand, disciplinary probation, fine, being debarred from examination, debarring the use of placement services, withholding of grades, withholding of degree, cancellation of registration, rustication and expulsion from the Institute.

## **11 Requirements for Graduation and Grant of Degrees**

- 1) In order to qualify to obtain a degree under any of the programme listed in sub-section (1.2) a student shall be required to pursue the courses of study for the specific programme and shall have to complete prescribed minimum number of credits for graduation.
- 2) A student shall be deemed to have completed the graduation requirements if the student has:
  - a) earned all the prescribed credits;
  - b) attained the minimum required CGPA;
  - c) satisfied the minimum academic and residence requirements (if any);
  - d) satisfied all the requirements specified by the concerned department, if any;
  - e) satisfied all the requirements specified by the Senate and the Ordinances;
  - f) paid all the dues to the Institute, and, has no pending case of indiscipline.
- 3) A student who has completed all the graduation requirements shall be recommended by the Senate to the Board of Governors for the award of appropriate Degree in the ensuing Convocation. A Degree can be awarded only after the Board has approved the award of the Degree.
- 4) Under exceptional circumstances, where gross violation of the graduation requirements is detected at a later stage, the Board of Governors may, on the recommendation of the Senate, cancel the Degree already awarded.

## **12 Scholarships, Prizes, Medals and Financial Assistance**

- 1) Scholarships, Free studentships, Prizes, Awards and Certificates of Merit shall be awarded to undergraduate students according to the rules laid down by the Senate and provisions of Statutes.
- 2) Scholarships and Free studentships are liable to be withdrawn, partially or wholly, in case of misconduct, deliberate concealment of material facts and/or supply of false information.
- 3) Scholarships will not be paid after the month in which a student completes all the prescribed academic requirements of the course.
- 4) To promote and recognize academic excellence, constructive leadership and overall growth and development of students, the Senate shall award Prizes/Medals/Scholarships to be instituted either by the Institute or through endowment/grants of donors. The norms and conditions for the institution of such Scholarships/Prizes/Medals shall require approval of the Board of Governors.

## **13 Payment of Fees and other Dues**

- 1) Every student shall pay to the Institute all such fees as may be charged from time to time towards academic and other incidental fees. All such fees will have to be paid within the dates as may be stipulated through notifications or as may be mentioned in the academic calendar.
- 2) Every student, who has been allotted a seat in a hostel or a hall of residence shall pay the hostel fees and clear all mess dues within the dates as may be notified.
- 3) The first instalment of fees which a student shall be required to pay at the time of admission will cover:

- a) Admission Fee
  - b) Registration Fee
  - c) First instalment of Tuition Fee
  - d) First instalment of seat rent including water and electricity charges (for students residing in Hostels/Halls)
  - e) Fees for Student's Senate, Medical Examination and Medical aid
  - f) Institute Caution Money
  - g) Hostel/Hall Caution Money (for students residing in Hostels/Halls)
  - h) Mess Advance (for students residing in Hostels/Halls)
  - i) Any other fees as may be decided.
- 4) In addition to the fees payable as above, a student who has been allotted a seat in a Hostel/ Hall shall be required to pay messing charges and such other dues as may be specified by the Warden of the Hostel/ Hall every month and in accordance to the rules framed.
  - 5) A student who does not pay the requisite fees within the specified dates during semester registration shall be debarred from all academic activities.
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**Indian Institute of Engineering Science and Technology, Shibpur**  
**The Regulations for Undergraduate Programmes, 2019**  
**(BTech, BArch and Dual Degree BTech – MTech Programmes)**

## **1 Introduction**

Whereas Section 27 of the National Institutes of Technology, Science Education and Research Act, 2007 (29 of 2007) enumerates the matters for which the Ordinances can be made.

And Whereas Section 28 of the said Act stipulates that the Ordinances shall be made by the Senate.

And Whereas the Senate of the Institute has framed the Ordinances for Undergraduate Programmes, 2019.

And Whereas Section 6 of the said Ordinances provides for framing of Regulations for the conduct and regulation of undergraduate programmes of the Institute and for matters connected therewith.

And Whereas it is considered necessary further to implement the Provisions of the aforementioned Act and the said Ordinances in so far as they relate to the conduct and regulation of undergraduate programmes; the Senate frames the Regulations for undergraduate programmes as follows: -

### **1.1 Title and Commencement**

- 1) These Regulations may be called the Regulations for Undergraduate Programmes, 2019.
- 2) These shall come into force on such date as the Chairman, Senate, may appoint and different dates may be appointed for different provisions of these Regulations and for different programmes.

### **1.2 Application**

- 1) These Regulations shall apply to all the programmes of the Institute to which the Ordinances for Undergraduate Programmes, 2019 apply.

### **1.3 Definitions**

- 1) **Ordinances** shall mean The Ordinances for Undergraduate Programmes, 2019 of the Institute.
- 2) **Department** shall mean an academic Department under whose aegis an undergraduate programme of the Institute is offered; the term shall include any Academic School or Centre offering an undergraduate programme.
- 3) Unless repugnant to the context, all terms used in these Regulations shall have the same meaning as defined in the Act and/ or the Statutes and/ or the Ordinances.

### **1.4 Abbreviations and Acronyms**

- 1) In these Regulations, the abbreviations and acronyms have the same meaning as mentioned in the Ordinances.

### **1.5 Committees and Officials**

The academic programmes of the Institute shall be governed by Rules and Regulations approved by the Senate from time to time. The Senate is the highest statutory and the supreme academic body of the institute that governs all academic matters of the Institute, and the rulings of Senate Chairman (Director of the Institute) are final in regard to all academic issues. A definite time schedule is set by the Senate for various academic

activities, through an Academic Calendar issued at the beginning of each academic year. The Senate continuously assesses the academic programmes and makes appropriate revisions/ modifications/ improvements as and when required through different Standing Committees of the Senate.

#### **1.5.1 Senate Undergraduate Committee (SUGC)**

The Senate Undergraduate Committee (SUGC) shall be a standing committee constituted by the Senate to look after all issues regarding all UG and DD programmes of the Institute. The SUGC shall make such recommendations on academic matters, including policy matters, for conduct of the programmes listed in Sub-section (1.2) of the Ordinances, as it may deem necessary or expedient, to the Senate, provided that no recommendation on policy matters shall be made without consulting Dean (Academic).

In particular, the SUGC shall have jurisdiction in recommending the Senate on following matters relating and concerning the undergraduate programmes of the institute:

- a) formal approval of new courses of instruction,
- b) desirable minor modifications of courses already approved,
- c) credit valuation of courses,
- d) formal approval of admission of the first-year students and others with advance standing,
- e) supervise conducting of examinations,
- f) evaluation of academic performance, and
- g) such other matters as may be referred to it by the Senate.

While the final authority shall vest with the Senate, the functions of the SUGC shall be primarily of general policy determination, coordination and review. The SUGC shall take views of on such matters relating to academics and academic discipline as may be referred to it by the Senate or by the Academic Section. While discharging its duties and responsibilities, the SUGC shall make full use of the appraisals and recommendations of the various academic departments/ schools/centres/ sections.

The composition of the SUGC shall be as given in **Annexure – I**.

#### **1.5.2 Departmental Undergraduate Committee (DUGC)**

The Departmental Undergraduate Committee (DUGC) shall be a department level committee that shall, in general:

- a) Advise the students about their curriculum and resolve any problem relating to conduct of an undergraduate programme run under the aegis of the department.
- b) Advises them about academic opportunities
- c) Monitors the progress of academically weak students
- d) Assists the Head of the Department in all UG/DD activities

The DUGC shall comprise members to be nominated by the DFC concerned.

The DUGC shall report and make recommendations to the SUGC as and when required. The SUGC, while making any recommendations may, in its own discretion, seek/receive opinions/recommendations from DUGC.

The composition of the DUGC shall be as given in **Annexure – I**.

#### **1.5.3 Departmental Faculty Committee (DFC)**

Departmental Faculty Committee (DFC) shall comprise all permanent faculty members of the Department and shall be chaired by the Head of the Department. DFC will nominate members of the DUGC.

#### **1.5.4 Board of Academics (BOAC)**

Each Department will have a Board of Academics (BOAC) consisting all faculty members of the Department and Experts from Industries and Premier Academic Institutes. Course curriculum and syllabi of the courses of any program offered by the Department will be examined and duly recommended by the BOAC for subsequent approval by the Senate. Any new course or program to be offered by the Department should also be examined and recommended by the BOAC before submission through SUGC to the Senate for approval.

#### **1.5.5 Academic Counsellor**

A student is assigned to an Academic Counsellor from his/her Department. Students are expected to consult the Academic Counsellor on any matter relating to selection of their courses and their academic performances in various semesters/ summer terms. The Academic Counsellor advises the students to complete their courses of study for the required degree in a smooth and satisfactory manner. The Academic Counsellor guides the students about the rules and regulations governing the courses of study for a particular degree.

The academic counsellor is the person whom the parents/ guardians should contact for performance related issues of their ward. The DUGC allots Academic Counsellors for the students after joining the Institute. A student remains under the guidance of the same Academic Counsellor throughout the duration of his/her programme of study.

All academic issues connected with the UG and DD programmes are handled by DUGC and SUGC. If, on any academic matter, a student would like to approach this administrative structure, it is always through the DUGC with advice and recommendations from his/her Academic Counsellor.

#### **1.5.6 Semester Course Convener**

Courses in a semester are conducted by the Semester Course Convener with the assistance of the required number of faculty members, instructors, and teaching assistants. The Semester Course Convener, as nominated by the DUGC, will be responsible for conducting the courses with the assistance of the respective teachers including preparation of question papers, evaluations of the answer scripts of mid-semester and end-semester examinations, evaluation of internal assessments, online marks entry and sending the award lists to the Academic Section within the prescribed time limit.

#### **1.5.7 Academic Section**

The office of the Dean (Academic), hereinafter called the **Academic Section**, is responsible for the implementation of the decisions taken on academic matters by the Senate and the SUGC.

## 2 The Undergraduate Programmes

The undergraduate programmes of the Institute shall be offered under the aegis of the different Departments as mentioned below.

### 2.1 Bachelor of Technology (BTech)

<b>BTech Programme in</b>	<b>Offered by</b>
a) Aerospace Engineering	Department of Applied Mechanics and Aerospace Engineering
b) Civil Engineering	Department of Civil Engineering
c) Computer Science and Technology	Department of Computer Science and Technology
d) Electrical Engineering	Department of Electrical Engineering
e) Electronics and Telecommunication Engineering	Department of Electronics and Telecommunication Engineering
f) Information Technology	Department of Information Technology
g) Mechanical Engineering	Department of Mechanical Engineering
h) Metallurgy and Materials Engineering	Department of Metallurgy and Materials Engineering
i) Mining Engineering	Department of Mining Engineering

### 2.2 Bachelor of Architecture (BArch)

This programme is offered by the Department of Department of Architecture, Town and Regional Planning.

### 2.3 Dual Degree (BTech - MTech)

<b>Dual Degree (BTech-MTech) Programme in</b>	<b>Offered by</b>
a) Aerospace Engineering	Department of Applied Mechanics and Aerospace Engineering
b) Civil Engineering	Department of Civil Engineering
c) Computer Science and Technology	Department of Computer Science and Technology
d) Electrical Engineering	Department of Electrical Engineering
e) Electronics and Telecommunication Engineering	Department of Electronics and Telecommunication Engineering
f) Information Technology	Department of Information Technology
g) Mechanical Engineering	Department of Mechanical Engineering
h) Metallurgy and Materials Engineering	Department of Metallurgy and Materials Engineering
i) Mining Engineering	Department of Mining Engineering

### 2.4 Duration of Programmes

Unless otherwise decided by the Senate, every BTech programme shall be of four-year duration while the BArch and the Dual Degree programmes shall be of five-year duration.

### 2.5 Introduction of New Programmes

The Senate may introduce such other UG programmes in such other disciplines for such other durations as it may decide through a resolution. However, no such new programme shall be introduced without the approval of the Board.

## **3 Admission**

### **3.1 Admission Office**

The institute shall have an Undergraduate Admission Office (under the Dean-Academic) that will look after the entire admission procedure for the B Tech, B Arch and Dual Degree programmes.

### **3.2 Eligibility for Admission**

The eligibility of a candidate and the admission criteria would be guided by the MHRD and the respective Councils for admission. Admissions to all Undergraduate Programmes will be at the First Semester level only. There will be no direct admission to higher semesters of the course.

#### **3.2.1 Indian Students**

In general, the admission of Indian nationals to the programmes mentioned in Sections (2.1 to 2.2) is through a national level selection test held once or more than once in a year. Presently, the performance in the **JEE-Main** is considered to be the basis for admission to these programmes. Students will get admission to a particular branch depending on their performance in the selection test and availability of seats in that particular branch.

#### **3.2.2 Foreign Students**

Admission of foreign students to the **BTech /DD courses**, are offered under the Cultural Exchange Fellowship Programme of the Government of India, administered by Indian Council of Cultural Relations (ICCR), New Delhi. The candidates are required to apply through the Indian High Commission/Embassy in their respective countries. For admission through Direct Admissions of Students Abroad (DASA) programme, prospective candidates may check the respective website. Each admitted student must submit authenticated copies of certificates/ mark-sheets/ transcripts of their qualifying degree and such other documents to the Academic Section before the Admission/ Registration date for the course.

### **3.3 Availability of Seats**

Each year, before admission to the first semester level, the actual number of seats available in each of the programmes mentioned in Sections (2.1 to 2.2) will be decided by the SUGC following the MHRD instructions, and will be subsequently approved by the Senate. The Institute will follow policies of reservation of seats in various categories as per the existing instructions of the Central Government.

The candidates who are selected for admission to a particular programme should remit admission and other fees to the Institute.

### **3.4 Cancellation of Admission**

- 1) All students admitted provisionally or otherwise to any programme shall submit prescribed documents by the last date specified for the purpose by the Academic Section. If any student fails to submit the prescribed documents by the specified date or to meet other stipulated requirement(s), his/her admission shall be cancelled.
- 2) The admission will also be cancelled at any later time if it is found that the student had supplied some false information or suppressed relevant information while seeking admission.
- 3) All admissions and cancellation of admissions to the programmes shall be reported by the SUGC to the Senate for approval.



## 4 Additional Scope for Already Admitted Students

A student admitted to a department through the process described in section 3, may opt for:

- a) Change of Branch (switching to another department after first year)
- b) Dual Degree (B. Tech.–M. Tech.) Programme

### 4.1 Change of Branch

Change of the branch is a privilege and not a right. Candidates admitted through JEE (Main) to B. Tech. programs (other than B. Arch students) only are eligible to be considered for a change of branch after the second semester.

#### 4.1.1 Eligibility

- a) The student must have completed all the credits prescribed in the first two semesters of the course, in his/her first attempt.
- b) The student must have obtained a Cumulative Grade Point Average (CGPA) not lower than 8.0 at the end of the Second Semester.
- c) The student has successfully completed the NCC/ NSS etc., requirements.
- d) No disciplinary action was taken against the student during the first two semesters.

#### 4.1.2 Notification

The academic section will notify the students and display on the notice boards about the changes of the branch at least fifteen days before the assigned date(s) of the registration of the third semester. All changes of branch made in accordance with the above rules will be effective from the third semester.

#### 4.1.3 Application for Branch Change

- a) Application for a change of branch must be made by the interested eligible students through a prescribed form (Annexure-II), after the notifications are made by the Academic Section at the end of the second semester. The students must apply to the Academic Section by the specified deadline.
- b) Application can be made for a change of branch to any Engineering branch (except Architecture, TRP).
- c) Eligible students may specify the choices of branches, in order of preference, to which they wish to change over. Choices cannot be changed once the application form is submitted.
- d) Change of branch shall be made strictly on the basis of merit of the applicant. For this purpose, the CGPA obtained at the end of the second semester will be considered. Ties will be broken by the JEE Main ranks of the applicants.
- e) Students whose branch change applications have been granted will be informed accordingly before the assigned date(s) of the registration of the third semester.

#### 4.1.4 Admission to the New Branch

- a) Students granted a branch change should do registration in the third semester for the branch to which change is granted.
- b) These students should register for courses after consulting the DUGC convener of the department to which they have been admitted.
- c) There is no provision for withdrawal from a branch change. Once a student's branch change application has been accepted, she/he will be considered a student of the new department for the entire period of her/his branch of study.

#### 4.1.5 Availability of Seats for Branch Change

- a) In any year, number of seats available in a particular branch is to be calculated before the branch change program. It may be calculated as (Sanctioned Strength + 2) – Existing Strength in that branch. Existing strength equals the number of students eligible for registration in third semester from the same branch. The actual vacancies in various categories (Gen/SC/ST/OBC/PC etc.) should also be noted.
- b) As a result of branch change allotment, number of registered students in third semester in any branch should not fall below 75% of its sanctioned strength in that year.

#### 4.1.6 Procedure for Branch Change

- a) From all valid applications for branch change, a rank list is prepared based on the CGPA obtained at the end of the second semester, separately for each category.
- b) Depending on the availability and her/his rank, a student will be allotted a branch as per her/his preference.
- c) The cutoff rank for branch change will be guided by clause 4.1.5 b).

#### 4.1.7 Important Note for Branch Change

- a) All changes of branches will be final and binding on the applicants. No student will be permitted, under any circumstances, to refuse the change of branch offered, and she/he cannot revert to the original department.
- b) Change of branch rules is subject to revision from time to time and the decision of the Senate will be final and binding.

#### 4.2 Dual Degree (BTech–MTech) (DD) Programme

- a) In the Dual Degree (BTech – MTech) D programme, a student will obtain both BTech and MTech degrees in same discipline after successful completion of the programme.
- b) An academically good student, having a CGPA of at least 7.0 till the end of sixth semester and without any backlog at the time of application, may exercise the option for entering a DD programme, at the end of 6<sup>th</sup> semester by filling up a prescribed form (**Annexure – III**) and their selection would be decided by the DUGC and SUGC.
- c) The selection for a DD programme is based on merit of the applicant and subject to availability of seats in the specialisation selected by the student.
- d) The duration of the DD programme is 10 (Ten) semesters.
- e) The course structure of a DD Programme up to the Sixth semester is common with that of BTech programme of the branch. A student will be allowed to pursue the DD programme from Seventh Semester onwards.

### 5 Internship

A student has to undergo at least one internship, as a part of her/his graduation requirement. This internship may be with an industry, with a research organization or with an IIT/NIT/Institutes of National Repute. The student may even undergo the internship with IEST also. Each internship will carry a credit of 2 (two). For awarding the credit, performance of the student will be assessed by the industry/institute and/or the Department concerned.

## **6 Academic Session**

### **6.1 Duration**

The academic session normally runs from mid-July in one year to the mid-July in the next year. It is divided into three parts:

- a) Odd semester Middle of July to middle of December
- b) Even semester End of December/beginning of January to middle of May
- c) Summer term Middle of May to middle of July

### **6.2 Semester Weeks**

Each of the two semesters (Odd and Even) consists of about eighteen weeks including i) class-weeks (13 weeks) devoted to teaching and continuous evaluation of theory and practical subjects, ii) examination (2 weeks), iii) publication of results (2 weeks) and iv) Fests, Sports and Holidays (1 week). All such activities throughout the semester will be displayed in the **Academic Calendar**.

### **6.3 Summer Term**

A Summer-Term is a condensed version of a regular semester, where, like a regular semester, classes and exams for courses will be held for academically weak students, for making up their deficiencies and improving their performances.

#### **6.3.1 Duration**

The duration of the Summer Term shall be eight weeks from the middle of May till the middle of July. The exact dates for holding the Summer Term in a year shall be decided by the Senate and will be mentioned in the Academic Calendar.

#### **6.3.2 Class Loads**

The total contact hours for the courses taken in the summer term will be same as that of the regular semester. The credits allotted to these courses shall remain the same.

#### **6.3.3 Attendance**

The attendance requirement for the Summer Term shall be the same as for a regular semester. A student who does not satisfy the norms will not be allowed to appear at the examination.

#### **6.3.4 Eligibility**

- a) A student will be eligible to register in a subject if he/she actually appeared at the last end-semester examination in that subject and obtained the grade 'F'.
- b) A student who is de-registered in one or more courses has to register for those courses in Summer-term only.
- c) A student shall not be allowed to register for more than two courses during a Summer Term.
- d) Summer Term in a course shall be offered only if at least 5 students register for that course.

#### **6.3.5 Registration**

All students intending to join a Summer Term must register themselves for the courses concerned on the day fixed for the purpose. No late registration shall be permitted on any ground. The intending students have to pay a Summer Term registration fee.

The list of courses to be offered during Summer Term will be finalized before the registration and will be displayed on the Institute website.

### **6.3.6 Assessment**

The examinations and continuous evaluation for internal assessment will be similar as that of regular semesters.

### **6.4 Academic Calendar**

The dates of all academic activities including semester registration, the first and the last days of classes, mid-term break, mid-term examination, end semester examination, supplementary examination, Fest days, holidays and vacations, are published in the Academic Calendar every year by the Academic Section as approved by the Senate. The Academic calendar will be available on the Institute website.

## 7 Curriculum

Every Department has a prescribed course structure which, in general terms is known as the Curriculum. It prescribes all the Theory courses/Laboratory courses/Projects and other requirements for the degree. It also gives the syllabus and a list of text/ reference books for each course. These courses/syllabi are updated regularly and are made available at the Institute Website.

Any faculty member can offer a new course by submitting a new course proposal to the concerned DUGC chairman. The course is to be recommended by the BOAC for approval by the Senate.

### 7.1 Courses

The courses in a discipline are broadly classified as Theory Courses and Laboratory Courses. Theory courses consist of lecture (L) and tutorial (T) hours and may have attached practical (P) hours in special cases while Laboratory courses have only practical (P) class hours.

The entire curriculum is divided into various set of courses: –

- a) **Institute Core (IC):** This is a compulsory set of courses for all B Tech /B. Arch students which include basic courses in Basic Science (Physics, Chemistry, and Mathematics), Engineering Science (Computing, Electrical, Electronics, Engineering Graphics, and Engineering Mechanics), Workshop, Humanities and Social Science, Communication Skills and Physical Education.
- b) **Departmental Compulsory Courses (DC):** This is a compulsory set of courses for Bachelor's students in their parent discipline.
- c) **Departmental Electives (DE):** These are elective courses that students have to take from within their parent discipline.
- d) **Open Electives (OE):** Courses offered by departments that students can take from outside their parent discipline. The students can also take the PG level open electives offered by other departments.
- e) **Laboratory:** The laboratory papers are based on some of the theory papers for which experimental, design or other field support is required.
- f) **Projects:** Students are to take some projects as sessional work in different stages of their curriculum:
  - 1) **B. Tech. Project:** In a B. Tech project, a student is required to do some innovative/practical work individually or in a group, under the guidance of a faculty member. This is done during the seventh and eighth semester. B. Tech. project may be offered as one unit 'Project' for a two-semester duration, or two independent units as Project-1 and Project-2 in the two semesters. In the second case, Project-2 builds on Project-1, and Project-1 becomes a pre-requisite for the Project-2.
  - 2) **Architectural Thesis:** BArch students will undertake architectural thesis in ninth and tenth and semester.
  - 3) **DD Project** is a mandatory requirement in the Dual Degree (BTech – MTech) Program. The project consists of three stages, spread over three semester duration, starting from the eighth semester and finishes in the tenth semester. These are research and development projects of an individual student, where the student trains himself/herself under the guidance of the supervisor(s).
- g) **Comprehensive Viva-Voce:** This will be held at the end of eighth semester for B. Tech. students and at the end of ninth semester for B. Arch. Students, to assess their overall domain knowledge. The students will appear before the board of examiners comprising of the teachers of the theory and laboratory courses the student has taken till that semester.

- h) **Internship/Industrial Training:** A student has to undergo one or more mandatory internship/training in the 8-semester B. Tech. programme as a part of his/her graduation requirement. This internship/training may be taken in an industry, in a research organization or in an Institute of national repute or even in this Institute. The total duration of internship/training in the 8-semester programme must be of minimum 4 weeks. BArch students will undertake the internship/professional training for a duration of 24 weeks in eighth semester.
- i) **Educational Tour:** BArch students will undertake two outstation tours in two semesters to learn about and gain exposure to architecture and/or town planning.
- j) **Non-Credit Courses:** One of the following activities, National Cadet Corps (NCC)/ National Social Service (NSS)/ Physical Training (PT)/ Yoga/ Physical Education is a mandatory requirement for all students for the award of degree. These are designed to sensitize the students to social/ national issues and are the non-credit courses.
- k) **Additional Courses:** A student may take additional courses over and above the curriculum requirement, either available as Institute/Departmental courses or online courses (NPTEL/MOOCs, etc.). Credits earned by the student from such courses will not be used to calculate the CGPA/SGPA of the student, but will be shown in the Grade Card as additional credits earned.

The list of courses (as detailed in section 7.1) to be offered by a department will be finalized by the Academic Section in consultation with the respective DUGC well before the date of registration. Details of various courses for undergraduate programmes being offered by various departments will be made available on the Institute website.

## **8 Registration for Courses**

### **8.1 Registration during Admission**

All admitted students must register for all the specified courses on payment of requisite fees within the scheduled date as mentioned in the admission brochure/ notified on the Institute website.

### **8.2 Semester Registration**

- a) For every student, registration for the courses before the beginning of each semester is mandatory till he/she completes his/her entire course of study.
- b) The registration is done on remittance of the requisite fees within the prescribed dates announced in the Academic Calendar/Institute website.
- c) The subjects to be pursued will be suggested by the Academic Counsellors from the respective departments.
- d) If a student does not register in a particular semester without prior permission of the SUGC, his/her studentship is liable to be cancelled.
- e) Without registration, a student will be debarred from all academic activities (courses/ seminars /projects etc.) in a semester and the student will be declared failed in all the courses of that semester and he/she has to repeat the semester.

### **8.3 Registration for Summer Term Courses**

- a) A student must register for Summer Term courses to make-up for any of his/her de-registered course(s)/failed course(s) including laboratory within the scheduled dates and must remit the requisite fees.
- b) Other students may also register for any summer term course being offered if they like to improve their grade. In that case, the earlier grade will be ignored.
- c) A student can register for a maximum of two courses in a summer term. No late registration shall be permitted on any ground.

### **8.4 Registration for Supplementary Examinations**

A student who obtained 'F' grade or 'I' grade in a course may appear in the Supplementary Examination which will be held after publication of results of the even semester. Students willing to appear in the supplementary examinations for such courses, should also register for those courses remitting the requisite fees within the scheduled dates. A student is allowed to appear for a maximum of three courses in the Supplementary examination.

### **8.5 Registration for Internship**

Any internal or external student may register for an Internship programme on any desired course/project in any Department during the summer term on remittance of requisite fees within the scheduled dates, which will be announced in the institute website. No late registration shall be permitted on any ground.

### **8.6 Procedure for Registration**

The registration schedule will be mentioned in the Academic Calendar. The registration process generally starts before the commencement of each semester. However, registration after the last date may be allowed with a 'Late Fee'. In all circumstances, semester registration must be completed on or before the prescribed last date for registration.

The registration process is to be followed as per the existing practice of the Institute – either online or manual. The student has to fill a Course Registration Form (CRF) for the courses that the student is required to pursue in that semester. The Common Course Registration Form is shown in **Annexure-V**.

### **8.7 Late Registration**

In special cases, on the ground of severe illness or some exigencies in the family of the student, if a student fails to contact the academic counsellor and/or avail the online facility/ institute portal in due time, the student may apply to the Chairman, DUGC through his/her academic counsellor with supporting documents/ medical certificates for late registration. The application will be processed through the Academic Section and sent to the SUGC for approval. In such cases, the student may be allowed by the SUGC to register late even after the commencement of semester classes (latest by one month) with payment of a late registration fee.

### **8.8 Cancellation of Registration**

A teacher of a course may recommend cancellation of registration of any student in that course for inadequate attendance without proper authorization.



## **9 Teaching**

### **9.1 Medium of Instruction**

The medium of instruction and examination is English. All students admitted to the B. Tech./ B. Arch. curriculum are required to take English as a part of their mandatory curriculum requirement.

### **9.2 Class Timings**

The Institute follows a 5 days per week schedule. Regular classes are held from Monday through Friday from 9am to 4:35pm. No classes are scheduled beyond this time period on a regular basis. Lecture/Tutorial classes are usually scheduled in 55-minute slots and lab classes are usually scheduled in 3 class-hours (165 minutes) slots. No classes are usually held on Saturdays and Sundays, unless announced by the Institute on recommendation of the Senate to make up for some holidays due to exigent conditions.

### **9.3 Extra Classes**

Extra classes may be scheduled by the teacher of a course, in case he/she cannot complete the allotted number of lecture-hours for the course, if he/she misses the scheduled classes due to repeated holidays on class-days or due to his/her leave or any other exigencies. Extra classes should be scheduled in consultation with the students registered in the course at a time mutually convenient to everyone.

### **9.4 Attendance**

- a) The attendance of a student in a course should not fall below 75% of total number of classes held for that course in the semester.
- b) The teacher of a course will inform the students about the status of their attendance in a subject after the mid-semester examination. The teacher will send the list of students having attendance less than 75%, one week before the end-semester examination, to the Academic Section for necessary action.
- c) Students having attendance below 75% in a course will be de-registered for that course. He/she will be debarred from appearing in the semester examination for that course and will be awarded an **DR** grade for that course.
- d) A student de-registered for a course may again register for that course in the next Summer Term.
- e) Attendance requirement for the Summer Term courses shall be the same as for a regular semester. A student not satisfying the norms will not be allowed to appear in the examination.

### **9.5 Absence due to any Genuine Reason**

If the absence of a student is due to any genuine reason like prolonged illness or serious accident or due to some assignments vested on the student by the Institute during the class-days to participate in any inter-institute sports, tech-fests, campus interviews etc., the student may apply to the Chairman of DUGC through the Academic Counsellor/ Institute Infirmary/ Dean of Students Welfare / Head of HRM Dept., as the case may be, with proper supporting documents for consideration by the SUGC that will take decision well before the commencement of the end semester examination.

## 10 Evaluation System

### 10.1 Evaluation for Theory Courses

The evaluation of students' performance in a theory course is a continuous process. A Student's performance in theory papers will be evaluated through Internal Assessment and an End-Semester Examination.

#### 10.1.1 Examinations

- a) In any semester, for theory courses there will be mid-semester examinations and end-semester examinations, conducted centrally by the Academic Section. Mid-semester examinations will be held in the middle of a semester, generally after completion of the first six to seven weeks of study. End-semester examinations will be held after the completion of the course. The dates of such examinations will be displayed in the Academic calendar.
- b) There will be supplementary examinations for the theory courses in which students have failed. Each year, supplementary examinations will be held after the publication of even semester results. Supplementary examinations are equivalent to the end-semester examinations and the students can retain their internal assessment.
- c) In the Summer Term also, for theory papers there will be mid-term examinations and end-term examinations, similar to mid-semester and end-semester examinations.
- d) The dates all examinations will be displayed in the Academic calendar.

#### 10.1.2 Internal Assessment

- a) The Internal Assessment has two components – i) performance in mid-semester examination and Teacher's assessment.
- b) The Teacher's assessment may have the following components – class tests, quizzes, home assignments, group assignments, viva-voce etc. as per the teacher's discretion.

#### 10.1.3 Weightages

A typical distribution of relative weightage for the various modes of assessments is mentioned below. The course teacher will inform the students about these weightages at the start of the semester.

- |  |     |
|--|-----|
| a) Internal Assessment   |     |
| i) Mid-semester examination  | 30% |
| ii) Class Test/Quiz/Viva-voce/ Assignments/<br>Presentation etc. as per Teacher's discretion | 20% |
| b) End-semester Assessment   | 50% |

For any student, appearing in the end-semester examination is mandatory.

To ensure the principle of continuous evaluation, it is recommended that the Teacher will conduct at least two quizzes/ class tests, one before the mid-term examination and other between the mid-term and the end-semester examination. If a student fails to appear in a mid-semester examination or class test or quiz, or submit an assignment etc., it is entirely up to the Teacher to judge about validity of the reason and decide whether or not to provide a make-up opportunity.

### 10.2 Evaluation for Laboratory Courses

The assessment in a laboratory course will be based on continuous evaluation of the student's weekly performance in laboratory experiments/ work, quality of their reports and a final performance in a semester-end test that contains experiment/quiz/test/viva-voce. The semester-end test on laboratory sessional will

normally be held a week before the end-semester theory examinations. For any student, appearing in the end-semester test is mandatory.

### 10.2.1 Weightages

A typical distribution of the relative weightage for these modes of assessments may be as follows.

- |  |     |
|--|-----|
| a) Regular performance in laboratory works | 30% |
| b) Quality of laboratory reports           | 30% |
| c) Semester-end test                       | 20% |
| d) Viva-voce/Teacher's Assessment          | 20% |

The course teacher will inform the students about these weightages at the start of the semester.

### 10.3 Evaluation of Projects and Seminars

Projects will be evaluated based on the performance of a student throughout the semester. These projects are performed by the students and need regular interaction (at least once a week) with the supervisor. At the end of the semester the student should submit a project report duly approved by the supervisor, and present the same through a seminar cum viva-voce before a board duly constituted by the department.

Departments may evolve rubrics for evaluation of Project work, which may include components like selection of topic, problem statement, literature review, methodology, oral and written presentation of the work done and performance in viva-voce examination.

#### 10.3.1 Weightages

A typical distribution of relative weightage may be as follows.

- |  |     |
|--|-----|
| a) Supervisor's Assessment (Project work + Report + Seminar) | 60% |
| b) Board of Examination's Assessment (Report + Seminar)      | 40% |

In case of an irregularity of interactions, or if the performance of a student is not satisfactory, the student may be awarded a 'F' grade. Such a student will be given a maximum time of two months to improve his/her performance. If the performance of such a student is not satisfactory even after the extended time period, he/she will have to repeat the project work in the next academic year. The board may award an 'I' grade if the student misses the presentation. If the basis for absence is valid, the student may be granted a second chance for presentation and 'I' grade may be converted to suitable grade that the student deserves.

### 10.4 Evaluation of Comprehensive Viva-voce

The comprehensive viva voce will be conducted for the students at the end of eighth semester to assess the comprehensive knowledge of the student in all the courses he/she has pursued till that semester. A viva voce board consisting of subject-teachers covering most of the courses is formed by the DUGC to conduct such viva voce examination.

### 10.5 Display of In-Semester Performance

In-semester performances in Mid-semester exam, quiz/ class test/viva etc. of all students must be displayed/communicated by the course teacher to the students before the commencement of the end-semester examination.

### 10.6 Disclosing the Evaluated Answer Scripts

The evaluated answer scripts of the end-semester examination of a subject have to be displayed to the students within the date, as mentioned in the Academic Calendar.

## 10.7 Retention of Answer Scripts

Evaluated answer scripts are to be preserved by the Teacher/ Departmental Office at least for one year.

## 10.8 Grade Card

- a) At the end of a semester examination, supplementary examination or summer-term examination, the teacher of a theory course will evaluate the end-semester answer-scripts and make online entry of the internal assessment marks and end-semester marks. For laboratory and other courses also, the concerned teacher will make online entry of marks obtained by the students in such courses. The teacher will also send a signed award sheet to the Academic Section within the scheduled date.
- b) The Academic Section will compile the marks and a letter grade will be awarded to the student for each course. A Grade Card will be prepared for each student showing the grades obtained by the student in each course and corresponding credit for the course. The Grade Card will also show the semester grade point average (SGPA) value and semester grade point average (CGPA) value obtained by the student.

### 10.8.1 Letter Grade

- a) As a measure of students' performance, a 10-scale grading system using the following letter grades and corresponding grade points per credit will be followed for theory courses.

Performance	Marks Obtained (%)	Letter Grade	Grade Point Credit
Excellent	90 to 100	A+	10
Very Good	80 to 89	A	9
Good	70 to 79	B	8
Fair	60 to 69	C	7
Average	50 to 59	D	6
Pass	40 to 49	P	5
Fail	< 40	F	0
Incomplete	–	I	–
De-registered	–	DR	–

- b) For practical courses including laboratory courses, projects, seminars, viva-voce, training etc., the 'P' grade is at 50%. Students who obtained marks less than 50% will be awarded 'F' grade. Definition of all other grades remains same.
- c) The course in which a student obtains 'F' grade will be a 'Backlog' for the student. A backlog can be cleared by appearing in a supplementary examination. The internal assessment marks obtained by the student for the course will be retained. The student may also register in the Summer-term for the course (if available), without retaining the internal assessment marks obtained for the course.
- d) A student may be awarded the grade 'I' (Incomplete) in a course if she/he fails to attend the end-semester examination. The candidate has to appear in supplementary examination for converting it into quantifiable letter grade.
- e) Students having attendance below 75% in a course will be de-registered and will be awarded a 'DR' grade. The student will not be eligible for supplementary examination and has to register for the course in the Summer-Term, without retaining the internal assessment marks obtained for the course.

### 10.8.2 Change of an Already Awarded Grade

The marks and the letter grades once awarded shall not be changed unless a request for change of marks is made by the teacher of the course, and is accepted by the Chairman-SUGC. Any such request for a change of grade must be made within two weeks from the publication of results.

### 10.8.3 Semester/Summer term Grade Point Average (SGPA)

A Semester Grade Point Average (SGPA) will indicate the performance of the student in a semester and the summer term to which it refers. It will be computed as follows.

$$SGPA = \frac{\sum_{i=1}^n c_i g_i}{\sum_{i=1}^n c_i}$$

where  $n$  is the number of courses the student registered in the semester/summer term,  $c_i$  is the number of credits allotted to the  $i$ -th course and  $g_i$  is the grade points awarded to the student for the  $i$ -th course. The calculated SGPA will be rounded off to the second place of decimal and recorded as such.

### 10.8.4 Cumulative Grade Point Average

Starting from the second semester, the Cumulative Grade Point Average (CGPA) would indicate the cumulative performance of the student from the first semester up to the semester/summer term to which it refers and will be computed as follows.

$$CGPA = \frac{\sum_{i=1}^m c_i g_i}{\sum_{i=1}^m c_i}$$

where  $m$  is the number of courses the students registered from first semester up to and including the semester/summer term concerned,  $c_i$  is the number of credits allotted to the  $i$ -th course and  $g_i$  is the grade points awarded to the student for the  $i$ -th course. The calculated CGPA will be rounded off to the second place of decimal and recorded as such. The CGPA, SGPA and the grades obtained in all the subjects in a semester will be shown in the Grade Card to be delivered to every student at the end of every semester/summer term.

### 10.8.5 Conversion of CGPA into Percentage Marks

In case of a specific query by a student/employer/any other Institute regarding conversion of CGPA into percentage marks, the following formula may be adopted for notional conversion of CGPA into percentage marks.

$$\% \text{ Marks} = (CGPA - 0.5) \times 10$$

## 10.9 Declaration of the Result

- a) The Academic Section will place the results of the examinations in a meeting of SUGC to decide about declaration. The grades earned by a student in a semester/summer term shall be communicated to him/her in the form of a printed copy of Grade Card. A sample Grade Card (sheet) is shown in Annexure- XI. The rank of a student will be decided based on CGPA obtained by him/her.
- b) Grade Card of a student may be withheld if he/she has not paid his/her dues, or if there is a pending disciplinary action against her/him, or for any other appropriate reason as per the directives of the Senate.

## 10.10 Provisional Certificate

The Academic Section will duly issue a certificate to declare that the student is provisionally admitted to the degree of BTech/BArch with effect from the date of the publication of result for the final examination provided the rest of the official procedure is completed by the student.

## **10.11 Degree Certificate**

The name of the student admitted to the Degree of the BTech/ BArch is to be approved by the Senate for conferring the formal degree in the next convocation of the Institute. A degree certificate duly signed by the competent authority will be awarded to the student.

## **10.12 Transcripts**

Students may apply for the transcripts for the courses pursued in different semesters, if required by other Institutes. The transcript will show the final grades and credits obtained in all courses semester-wise and also for the summer term(s) showing the date on which the credit was actually credited.

## **11 Graduation Requirements**

### **11.1 BTech and BArch Degree**

In order to qualify for a BTech or BArch Degree of the Institute covered under these Regulations a student must:

- a) Complete all the credit requirements for the degree as laid down in the prescribed curriculum of the discipline.
- b) Obtain a CGPA of 5.00 or higher at the end of the semester in which he/she completes all the requirements for the degree.
- c) Have cleared all dues to the Institute, the Halls of Residence, the Library, other facilities and the Department.

### **11.2 Award of the Degree**

The name of the student admitted to the Degree of the BTech/BArch is to be approved by the Chairman, Senate for conferring the formal degree in the next convocation of the Institute.

### **11.3 Course Completion Time**

Normally a student should complete all the requirements i) in eight consecutive semesters for a BTech degree, ii) in ten consecutive semesters for a BArch Degree and iii) in ten consecutive semesters for a Dual Degree (BTech – MTech). However, academically deficient students may complete their requirements within a maximum period of (i) Eight years for B. Tech. degree, (ii) Ten years for B. Arch. Degree and iii) Ten years for Dual Degree (BTech – MTech).

### **11.4 Inadequate Academic Performance**

A student is expected to maintain at least a minimum level of performance at all times. The academic performance of academically deficient students is reviewed by the DUGC/SUGC/academic counsellor at the end of each semester.

#### **11.4.1 Academically Weak Student**

A student having two or more backlogs in a semester will be identified as an academically weak student. The student will be placed on warning, and his/her parents/guardian will be informed. She/he shall not hold any office in the Hall of Residence, Students Senate/Hobby Clubs or any other organization/body.

#### **11.4.2 Promotion to the Next Year**

A student may be promoted to the next academic year, if

- a) the student does not have any backlog of the previous year (if any), and
- b) the student should not have more than five backlogs in the current academic year.

Otherwise, the student will not be promoted and has to repeat the current year. In case of repeat, a student may opt for repeating only for the courses in which she/he obtained 'F' grade. He/she may also selectively choose to repeat for any/all subjects he/she obtained grades higher than 'F', and apply to the SUGC through DPGC and academic counsellor.

### **11.5 Discontinuation of Study**

If a student does not register and defaults in paying the dues for a semester, without the approval of the SUGC or any other competent authority, he/she shall have to discontinue studies and leave the Institute.

A student, whose cumulative academic records at the end of any semester clearly indicate that he/she will not be able to qualify for the degree for which he/she had been admitted within the specified maximum time limits, may be asked to discontinue studies and leave the Institute.

A student having faced a disciplinary action for some of his/her act(s), which is detrimental to the student life and may pollute the academic environment in the Institute, the Institute may cancel his/her admission and the student may be asked to leave the Institute at any time at the discretion of the SUGC/Senate.

The Academic Section will issue a termination letter to the respective student. This information will also be sent to the Head of the Department and other concerned offices. The student will have to vacate his/her hostel accommodation and shall not be entitled to enjoy any other facility of the Institute.

### **11.6 Appeal against Discontinuation**

- a) A student whose program is terminated may appeal to the Chairperson, Senate, for re-reinstatement in the program.
- b) In cases of termination due to inadequate academic performance, the student should clearly explain causes for the poor performance, including how those causes will not adversely affect her/his performance in the future. The Senate shall take a final decision after considering all available inputs.
- c) A student may re-appeal even after a previous appeal has been rejected. However, the Senate may not entertain any re-appeal for review unless substantial additional information is brought to its notice.

### **11.7 Relaxation**

Under exceptional circumstances, if a student has a severe deficiency in any of the requirements stated in these Regulations due to psychological or other medical conditions, the SUGC/Senate may relax the relevant provisions of these Regulations based on the merit of the case. The grounds on which such relaxation is granted shall invariably be recorded and cannot be cited as precedence.

### **11.8 Temporary Withdrawal from the Course of Study**

Students are expected to complete their Course of Study without any break. However, for bonafide reasons like prolonged illness or acute problems or exigencies happening in his/her family, Senate may grant leave of absence (temporary withdrawal) from the Course of Study. But such absence(s) shall ordinarily not exceed two semesters with or without break.

The student should apply to the DUGC within 15 days of the commencement of the semester or the incident or from the date he/she last attended his/her classes whichever is later, stating fully the reasons for such withdrawal together with supporting documents and endorsement of the parent/guardian.

The Institute has to be satisfied that, inclusive of the period of withdrawal, the student is likely to complete his requirements for the degree within the time limits specified in Section 11.3, and that there are no outstanding dues or demands on him/her.

A student who has been granted temporary withdrawal from the Institute will be required to pay the tuition fee and other essential fees/late fees/ other charges for the intervening (withdrawal) period while joining for

the course later. A student will be granted only one such temporary withdrawal during his/her entire tenure as a student of the Institute. A student who has been granted a temporary withdrawal on medical grounds will be allowed to re-join and resume his/her studies only after being declared medically fit by the Institute Hospital. The grounds on which such withdrawal is granted shall invariably be recorded and cannot be cited as precedence.

## **12 Scholarships, Medals, Awards and Prizes**

### **12.1 Institute Scholarships, Medals and Prizes**

The Institute awards a number of medals and prizes to students with excellent academic records, from the Institute fund. List of such medals and prizes are available from the Academic Section as well as in the Institute website.

Basic Eligibility Criteria for all Institute Medals, Awards and Prizes: A student is eligible for the award of any medals or prize if

- a) He/she has passed in all the prescribed subjects in the programme and cleared all other requirements, if any, obtaining a CGPA not lower than 8.0 in the semester after which the Medal or Prize is to be awarded.
- b) He/she has not failed in any subject at any stage during his/her academic career till the time of the award.
- c) No disciplinary action has been taken against him/her for any offence at any time prior to the award.
- d) He/she has not been punished under examination malpractice and involved in violation of code of conduct at any stage of the course in the Institute.

Specific rules that govern any particular medal/award/prize, are mentioned against each such award in the List. In case of a tie between two or more students, the prize will be awarded jointly, the value of prize shall be equally shared amongst the awardees and the award certificate will mention 'jointly awarded'.

### **12.2 Endowment Medals, Prizes and Scholarship**

A number of medals and prizes are awarded through endowment fund. Lists and the rules that govern such awards are mentioned in the list of Endowment Awards, available in the Academic Section. The Institute awards endowment medals, scholarships, awards and prizes to the students on the basis of merit or means as specified in each case separately. The following basic rules govern the conditions for such awards.

All Endowment Scholarships will be awarded from the income of endowments received by the Institute from Industries, Institutions, R & D Organizations, Alumni and other individuals for this purpose.

The students i) who have failed in any subject at any stage during his/her academic career till the time of the award, ii) undergone disciplinary action for any offence at any time prior to the award, iii) punished under examination malpractice and involved in violation of code of conduct at any stage of the course in the Institute; are not eligible for such award.

The Institute may decide to discontinue the award of any endowment medal, prize or merit certificate at any moment of time, if it so desires and feels fit. The same be communicate in writing, citing the reasons to the donor/society granting such funds or endowments.

The conferment of award, medals, prizes & merit certificate shall be made during the Annual Convocation of the Institute/or on any other occasion decided by the Senate, following the announcement of the results on which the prize is based.



### **12.3 Conduct of an Awardee**

An awardee of a medal, award or prize under these rules is expected to maintain, besides satisfactory academic progress, regularity in attendance and good conduct, behaviour and discipline in the Department and in the Institute/Halls of Residence. In the event of an awardee being found to be involved in any act of misconduct, misbehaviour, indiscipline or adopting unfair means at an examination, the award or prize is liable to be cancelled with immediate effect, before its disbursement.

### **13 End Note**

The rules and regulations mentioned in this document are to be applicable from 2019 onwards. However, some propositions mentioned here are new compared to the prevailing rules/norms and are dependent on the appropriate/adequate infrastructure available in the Institute. It is suggested to have gradual implementation of such rules/propositions in commensurate with the improvements in the infrastructure. However, the basic spirit of quality teaching, opportunities for students, and improving the academic ambience should continuously be adhered to.

## Constitutions of Various Committees

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### A. Senate Under-Graduate Committee (SUGC)

The Senate Undergraduate Committee (SUGC) will have the following members –

- 1) Chairperson
- 2) Members–
  - a) Conveners of various DUGCs
  - b) Last SUGC Chairperson (Ex-officio)
  - c) One Senate Nominee
  - d) Four Students Representatives from the Students Senate

The Chairperson shall be nominated by the Senate from amongst the members of the Senate. The tenure of the Chairman and the Senate nominee shall be normally of two years. Student representatives as nominated by the undergraduate students will change every year. One member will be nominated by the Chairman to act as convener.

The SUGC must meet as frequently as essential, but at least two times in every Semester.

### B. Departmental Under-Graduate Committee (DUGC)

Each academic department constitutes this committee which consists of the following –

Chairperson : Head of the Department

Convener : A faculty member of the department, nominated by the DFC

Members : At least four faculty members of the Department

Student Representatives: Two undergraduate students (one preferably a female student) of the department one each from second year and third year.

The members and the convener will have a rotational term of two years. Student representatives as nominated by the undergraduate students will change every year.

### C. Departmental Faculty Committee (DFC)

The Departmental Faculty Committee will have the following structure –

Chairperson : Head of the Department

Convener : A faculty member of the department, nominated by the Head

Members : All faculty members of the Department

Tenure of the Convener will be normally of two years.

### D. Board of Academics (BOAC)

Each Department should have a Board of Academics comprising the following members –

Chairperson : Dean Academic

Convener : Head of the Department

Members : All faculty members of the Department

External Members : Eminent experts from Industry and Premier Academic/Research Institutes

Names of the External Members will be nominated by the DFC through the Head to the Senate for approval.

Tenure of the External Members will normally be of two years.

Indian Institute of Engineering Science & Technology, Shibpur

Application Form for Branch Change

Student Name : Academic Session: 20....-....  
Department : Semester :...2<sup>nd</sup>.....  
Enrolment no. : CGPA till 2<sup>nd</sup> Semester: .....  
Student registered e-mail : Backlog, if any: .....

Opting for Change to other department in order of preference:

1)
2)
3)

\_\_\_\_\_  
Signature of the Student

Endorsed by:

Parent/Guardian of the Student Academic Counsellor Chairman, DUGC of parent Dept.

Permitted/Not permitted

Dy. Registrar (Academic)

Chairman /SUGC

Indian Institute of Engineering Science & Technology, Shibpur

Option Form for Dual Degree

Student Name : Academic Session : 20....-....  
Department : Semester No...6<sup>th</sup>  
Enrolment no. : CGPA till 6<sup>th</sup> Semester: .....  
Student registered e-mail : Backlog, if any:  
.....

I am opting for Dual Degree programme now at the end of 6<sup>th</sup> semester for remaining four semesters i.e. from 7<sup>th</sup> – 10<sup>th</sup> semesters. I accept the terms and conditions of the Dual Degree programme:

\_\_\_\_\_

Signature of the Student

Endorsed by:

Parent/Guardian of the Student Academic Counsellor

Accepted in the specialisation of \_\_\_\_\_

Chairman, DUGC of parent Dept.

I agree.

\_\_\_\_\_

Signature of the Student

Chairman /SUGC

**Indian Institute of Engineering Science & Technology, Shibpur**

**Application for Summer Internship Programme**

Applicant's Name : Academic Session: 20....-....

Applicant's Institute & Department Address:

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Opting for the Summer Internship on (vide advertisement dated: .....)

Course/Project Title  
.....

Course/Project under Prof. ....

In the Department of ....., IEST, Shibpur

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Signature of the Student

Recommendation by the parent Institute/Department is attached/uploaded:

Endorsement by:

Faculty member providing the Internship

Chairman DUGC.

Permitted/Not permitted

Intern ID:

Tuition Fee:

Residence Fee:

Other Fees:

Dy Registrar (Academic)

Chairman /SUGC

**Indian Institute of Engineering Science & Technology, Shibpur**

**Common Course Registration Form**

Indian Institute of Engineering Science & Technology, Shibpur

Student Name : Academic Session: 20....-....  
 Department : Semester No.....  
 Enrolment no. : Semester: Autumn/Spring/Summer  
 Student registered e-mail: CGPA till last Semester: .....  
 Backlog, if any: .....

Registration for Supplementary Examination/Courses (separate form should be submitted)

Core Theory (with code)	
Elective (with code)	
Open Elective(with code)	
Project/ Internship/Viva voce, Seminar, etc.	
Laboratory (with code)	

Endorsement by:

Signature of the Student

Academic Counsellor

Chairman DUGC

Dy Registrar (Academic)

### Unique Coding of a Course, Contact Hours and Credit

The name of a course will follow the identification pattern with Alpha-Numeric code.

Procedure for Subject Coding:

Code: WWXYZZ

WW: Department Code (e.g., EE/CE/ME etc.)

X: Year (1,2,3,4 for BTech; 5,6 MTech, MSc, MBA; 8 for PhD)  
(1,2,3,4,5 for BArch.; 6,7 for MPlan)

Y: Sem Code – 1 for odd semester and 2 for even semester

*Theory Courses*

ZZ: 01 – 20 – for Core Courses

21 – 60 – for Dept. Electives

61 – 70 – for Open Electives

*Laboratory / Practical / Project*

71 – 90 – Laboratory courses with weekly class loads

91 – 99 – Thesis/Project/internship/Viva etc., without weekly class loads

The contact hours and credits are also expressed in numeric. Contact hours may be for purely Lecture (L), Tutorial (T), and purely practical (P). viz. for a Civil Engineering UG 4<sup>th</sup> semester theory course: **Soil Mechanics** with 3 Lecture classes/week and a credit of 3 the code is **CE 2205** derived as follows:

Dept. Code		Year	Semester	Serial No		Title	L	T	P	C
A	A	N	N	N	N	C	N	N	N	N
C	E	2	2	0	5	Soil Mechanics	3	0	0	3

In the course curriculum, the class-hr & credit for the above course will be mentioned as: **3 0 0 3**.

Similarly, for a Civil Engineering UG 5<sup>th</sup>semester laboratory/practical course **Structural Engineering Lab** is shown as: **CE 3107** and its class-hr & credit will be mentioned as **0 0 3 2**.

Dept. Code		Year	Semester	Serial No		Title	L	T	P	C
C	E	3	1	0	7	Structural Engineering Lab	0	0	3	2

## Structure of the Curriculum

### Four-Year B. Tech. Curriculum

The structure of the curriculum consists of the courses as mentioned in section: 7.

About 13 Fundamental Courses (FC) introducing the student to the foundations of engineering and social sciences.

About 20 Departmental Core (DC) subjects enabling the students to take up a group of courses in his/her branch of study

About 2 Departmental Electives (DE) subjects and

About 2 Open Electives (OE) subjects offered by other departments;

About 24 laboratory/practical courses

Internship and project

In addition, a student should satisfactorily complete the prescribed non-credit courses on NCC/NSO/NSS/PT/Yoga/Physical education, etc. programme.

### Five-Year Dual Degree (B. Tech – M. Tech) Programme

The Dual Degree Programme structure has two basic parts – BTech and MTech. The structure of the B. Tech part has all the components as mentioned in Section 9.7.1. The M. Tech part is divided into two categories – Programme Core (PC) and Programme Elective (PE) in addition to MTech thesis.

### Curriculum Credit Ranges

The total credit in different parts of the curriculum structure of a department may vary, depending on the requirements of a particular Department. The possible ranges are mentioned bellow.

Degree Type	Fundamental Courses (FC)	Departmental Core (DC)	Departmental Elective (DE)	Open Elective (OE)	Project (PR)	Comprehensive Viva (CV)	Total
BTech.	57-60	103-110	6	6	10	2	184-194

Degree Type	Fundamental Courses (FC)	Departmental Core (DC)	Departmental Elective (DE)	Open Elective (OE)	Project and Thesis (PR)	Comprehensive Viva (CV)	Total
BArch.	21(7 courses)	85(31 courses)	6(2 courses)	6(2 courses)	44	2	179

Degree Type	Fundamental Courses (FC)	Departmental Core (DC)	Open Elective (OE)	Programme Core (M. Tech)	Thesis	Comprehensive Viva (CV)	Total
Dual Degree (BTech. –MTech.)	57-60	97-104	6	24-28	54	2	239-254



## Semester-wise Course Structure

4-year BTech Programme from 2019-20 session

## First Semester

Sl. No	Course Name	Course code	Class Load/Week			Credit	Class load/week	Marks
			L	T	P			
1.	Mathematics – I		3	1	0	4	4	100
2.	Chemistry/Physics		3	0	0	3	3	100
3.	Intro to Computing/English Communication		3	0	0	3	3	100
4.	Ecology & Environment /Mechanics		3	0	0	3	3	100
5.	Basic Electronics /Basic Electrical		3	0	0	3	3	100
	Theory Sub-total		15	1	NIL	16	16	500
6.	Chemistry Lab/Physics Lab		0	0	3	2	3	50
7.	Electronics Lab/ Electrical Lab		0	0	3	2	3	50
8.	Drawing/Workshop		0	0	3	2	3	50
9.	Computer Lab/ English Lab		0	0	3	2	3	50
10.	NSS/NCC/PT/Yoga							
	Practical Sub-total		NIL	NIL	12	8	12	200
	First Semester Total					24	28	700

## Second Semester

Sl. No	Course Name	Course code	Class Load/Week			Credit	Class load/week	Marks
			L	T	P			
1.	Mathematics – II		3	1	0	4	4	100
2.	Physics/Chemistry		3	0	0	3	3	100
3.	English Communication/Intro to Computing		3	0	0	3	3	100
4.	Mechanics/Ecology & Environment		3	0	0	3	3	100
5.	Basic Electrical/Basic Electronics		3	0	0	3	3	100
	Theory Sub-total		15	1	NIL	16	16	500
6.	Physics Lab/Chemistry Lab		0	0	3	2	3	50
7.	Electrical Lab/Electronics Lab		0	0	3	2	3	50
8.	Workshop/Drawing		0	0	3	2	3	50
9.	English Lab/Computer Lab		0	0	3	2	3	50
	Practical Sub-total		NIL	NIL	12	8	12	200
	Second Semester Total					24	28	700

**Third Semester**

Sl. No	Course Name	Course code	Class Load/Week			Credit	Class load/ week	Marks
			L	T	P			
1.	Mathematics – III		3	0	0	3	3	100
2.	Core Theory – I		3	1	0	4	4	100
3.	Core Theory – II		3	0	0	3	3	100
4.	Core Theory – III		3	0	0	3	3	100
5.	Core Theory – IV		3	0	0	3	3	100
	Theory Sub-total		15	1	NIL	16	16	500
6.	Core Lab/Pract – I		0	0	3	2	3	50
7.	Core Lab/Pract – II		0	0	3	2	3	50
8.	Core Lab/Pract – III		0	0	3	2	3	50
9.	Seminar/Minor Project		0	0	0	2	0	50
	Practical Sub-total		NIL	NIL	9	8	9	200
	Third Semester Total					24	25	700

**Fourth Semester**

Sl. No	Course Name	Course code	Class Load/Week			Credit	Class load/ week	Marks
			L	T	P			
1.	Core Theory – V		3	0	0	3	3	100
2.	Core Theory – VI		3	1	0	4	4	100
3.	Core Theory – VII		3	0	0	3	3	100
4.	Core Theory – VIII		3	0	0	3	3	100
5.	HSS –II		3	0	0	3	3	100
	Theory Sub-total		15	1	NIL	16	16	500
6.	Core Lab/Pract – IV		0	0	3	2	3	50
7.	Core Lab/Pract – V		0	0	3	2	3	50
8.	Core Lab/Pract – VI		0	0	3	2	3	50
9.	Core Lab-VII /Minor Proj contd.		0	0	0	2	0	50
	Practical Sub-total		NIL	NIL	9	8	9	200
	Fourth Semester Total					24	25	700

**Fifth Semester**

Sl. No	Course Name	Course code	Class Load/Week			Credit	Class load/ week	Marks
			L	T	P			
1.	Core Theory – IX		3	1	0	4	4	100
2.	Core Theory – X		3	1	0	4	4	100
3.	Core Theory – XI		3	0	0	3	3	100
4.	Core Theory – XII		3	0	0	3	3	100
5.	HSS – III		3	0	0	3	3	100
	Theory Sub-total		15	3	NIL	18	17	500
6.	Core Lab/Pract – VIII		0	0	3	2	3	50
7.	Core Lab/Pract – IX		0	0	3	2	3	50
8.	Core Lab/Pract – X		0	0	3	2	3	50
	Practical Sub-total		NIL	NIL	9	6	9	150
	Fifth Semester Total					24	26	650

**Sixth Semester**

Sl. No	Course Name	Course code	Class Load/Week			Credit	Class load/ week	Marks
			L	T	P			
1.	Core Theory – XIII		3	1	0	4	4	100
2.	Core Theory – XIV		3	1	0	4	4	100
3.	Core Theory – XV		3	0	0	3	3	100
4.	Core Theory – XVI		3	0	0	3	3	100
5.	Core Theory – XVII		3	0	0	3	3	100
	Theory Sub-total		15	2	NIL	17	17	500
6.	Lab – XI		0	0	3	2	3	50
7.	Lab – XII		0	0	3	2	3	50
8.	Lab – XIII		0	0	3	2	3	50
	Practical Sub-total		NIL	NIL	9	6	9	150
	Sixth Semester Total					23	26	650

### Seventh Semester

Sl. No	Course Name	Course code	Class Load/Week			Credit	Class load/ week	Marks
			L	T	P			
1.	Core Theory – XVIII		3	0	0	3	3	100
2.	Core Theory – XIX		3	0	0	3	3	100
3.	Core Elective – I		3	0	0	3	3	100
4.	Open Elective – I		3	0	0	3	3	100
	Theory Sub-total		12	0	0	12	12	400
6.	Lab – XIV		0	0	3	2	3	50
7.	Lab – XV		0	0	3	2	3	50
8.	B. Tech Project/1		0	0	2	4	2	100
9.	Internship from 4 <sup>th</sup> /6 <sup>th</sup> Sem (Evaluation)		0	0	0	2	0	50
	Practical Sub-total		NIL	NIL	8	10	8	250
	Seventh Semester Total					22	20	650

### Eighth Semester

Sl. No	Course Name	Course code	Class Load/Week			Credit	Class load/ week	Marks
			L	T	P			
1.	Core Theory – XX		3	1	0	4	4	100
2.	Core Elective – II		3	0	0	3	3	100
3.	Open – Elective II		3	0	0	3	3	100
	Theory Sub-total		10	1	0	10	10	300
4.	B. Tech Project /2		0	0	2	8	2	200
5.	Seminar		0	0	0	2	0	50
6.	Comprehensive Viva		0	0	0	2	0	100
	Practical Sub-total		10	1	2	12	2	350
	Eighth Semester Total					22	12	650

This is the basic course structure. There may be small variations in credits depending on the requirements of a particular department. Credits in each semester may vary between 22-26.

## Semester-wise Course Structure

5-year Dual Degree BTech-MTech Programme from 2019-20 session

The course structure for 1<sup>st</sup> to 6<sup>th</sup> semester for Dual Degree is same as BTech curriculum for the respective semester.

## Seventh Semester (DD)

Sl. No	Course Name	Course code	Class Load/Week			Credit	Class load/ week	Marks
			L	T	P			
1.	Core Theory – XVIII		3	0	0	3	3	100
2.	DD I		3	0	0	3	3	100
3.	DD II		3	0	0	3	3	100
4.	DD III		3	0	0	3	3	100
5.	Open Elective – I		3	0	0	3	3	100
	Theory Sub-total		15	0	0	15	15	500
6.	Lab – XIV		0	0	3	2	3	50
7.	Lab – XV		0	0	3	2	3	50
8.	Internship from 4 <sup>th</sup> /6 <sup>th</sup> Sem (Evaluation)		0	0	0	2	0	50
	Practical Sub-total		NIL	NIL	8	10	8	150
	Seventh Semester Total					22	21	650

## Eighth Semester (DD)

Sl. No	Course Name	Course code	Class Load/Week			Credit	Class load/ week	Marks
			L	T	P			
1.	DD IV		3	0	0	3	3	100
2.	DD V		3	0	0	3	3	100
3.	DD VI		3	0	0	3	3	100
4.	DD VII		3	0	0	3	3	100
5.	Open –Elective II		3	0	0	3	3	100
	Theory Sub-total		10	1	0	10	15	500
6.	M. Tech Project Part I (Term paper)		0	0	2	4	2	200
7.	Term paper seminar and viva voce		0	0	0	2	0	100
8.	Comprehensive Viva		0	0	0	2	0	100
	Practical Sub-total		10	1	2	12	2	400
	Eighth Semester Total					22	17	900

**Ninth Semester (DD)**

Sl. No	Course Name	Course code	Class Load/ Week			Credit	Class load/ Week	Marks
			L	T	P			
1.	DD VIII		3	0	0	3	3	100
	Theory subtotal		3	0	0	3	3	100
2.	M. Tech. Project Part II (Progress report)		0	0	0	12	0	300
3.	Progress report seminar and viva voce		0	0	0	6	0	100
	Practical Sub-total		0	0	0	18	0	400
	Ninth Semester Total					21	3	500

**Tenth Semester (DD)**

Sl. No	Course Name	Course code	Class Load/ Week			Credit	Class load/ Week	Marks
			L	T	P			
1.	M. Tech. Final Project (Thesis)		0	0	0	22	0	400
2.	Thesis seminar and viva voce		0	0	0	8	0	200
	Practical Sub-total		0	0	0	24	0	600
	Tenth Semester Total					24	0	600

DD are PG subjects for Dual Degree students.

Core theory are UG subjects – common with 4 year BTech

Open Electives are also common with BTech students.

## Semester-wise Course Structure

5 year BArch Programme from 2019-20 session

First Year (1<sup>st</sup> and 2<sup>nd</sup> Semester)

<i>First Year: First Semester</i>						
Code	Subject	Periods/Week			Marks	Credit
		L	T	S		
Theoretical Subjects		L	T	S		
HU11ZZ	English Communication	2	0	0	50	2
MA11ZZ	Mathematics IA (in lieu of Mathematics I)	3	0	0	100	3
AM11ZZ	Engineering Mechanics	3	0	0	100	3
AP1101	Design Fundamentals	3	0	0	100	3
AP1102	Materials & Methods of Construction I	3	0	0	100	3
	Sub total	14	0	0	450	14
Sessional Subjects						
HU11ZZ	English Lab	0	0	3	50	2
WS11ZZ	Workshop Practice	0	0	3	50	2
AP1180	Basic Design	0	0	6	150	4
AP1181	Architectural Delineation	0	0	3	100	2
AP1182	Descriptive Geometry I	0	0	6	150	4
	Sub total	0	0	21	500	14
TOTAL		35			950	28
SA 191A	Additional Elective NCC /NSS / Physical Training / Yoga	0	0	2	50	

<i>First Year: Second Semester</i>						
Code	Subject	Periods / Week			Marks	Credit
		L	T	S		
Theoretical Subjects		L	T	S		
MA12ZZ	Mathematics IIA (in lieu of Mathematics II)	3	0	0	100	3
CS12ZZ	Introduction to Computing	3	0	0	100	3
CE12ZZ	Environment and Ecology	2	0	0	50	2
AM12ZZ	Strength of Materials	3	0	0	100	3
AP1201	Evolution of Architecture I	3	0	0	100	3
AP1202	Materials and Methods of Construction II	3	0	0	100	3
	Sub total	17	0	0	550	17
Sessional Subjects						
CS12ZZ	Computer Lab	0	0	3	50	2
AP1280	Architectural Design Studio I	0	0	6	150	4
AP1281	Descriptive Geometry II	0	0	6	150	4
AP1282	Details of Construction Practice I	0	0	3	100	3
	Sub total	0	0	18	450	12
TOTAL		35			1000	29

**Second Year (3rd and 4th Semester)**

<i>Second Year: Third Semester</i>						
Code	Subject	Periods / Week			Marks	Credit
Theoretical Subjects		L	T	S		
CE21ZZ	Theory of Structures	3	0	0	100	3
CE21ZZ	Surveying	2	0	0	50	2
AP2101	Evolution of Architecture II	3	0	0	100	3
AP2102	Materials and Methods of Construction III	3	0	0	100	3
AP2103	Plumbing Services	3	0	0	100	3
AP2104	Climatology	2	1	0	50	2
	Sub total	16	1	0	500	16
Sessional Subjects						
AR 351	Architectural Design Studio II	0	0	9	200	6
AR 352	Details of Construction Practice II	0	0	3	100	2
AR 353	Computer Aided Design and Drawing	0	0	3	100	2
	Sub total	0	0	15	400	12
<b>TOTAL</b>		32			900	26

<i>Second Year (Part II): Fourth Semester</i>						
Code	Subject	Periods / Week			Marks	Credit
Theoretical Subjects		L	T	S		
CE22ZZ	Design of Structures I	3	0	0	100	3
EE22ZZ	Building Services I: Electrical Installations and Architectural Illumination	3	0	0	100	3
AP2201	Evolution of Architecture III	3	0	0	100	3
AP2202	Materials and Methods of Construction IV	3	0	0	100	3
AP2203	Introduction to Landscape Architecture and Site Planning	3	0	0	100	3
	Sub total	15	0	0	500	15
Sessional Subjects						
CE22ZZ	Surveying Practice	0	0	3	50	2
AP2280	Architectural Design Studio III	0	0	9	200	6
AP2281	Details of Construction Practice III	0	0	3	100	2
AP2282	Landscape and Site Planning Practice	0	0	3	50	2
AP2290	Educational Tour <sup>1</sup>	~12 days			50	2
	Sub total	0	0	18	450	14
<b>TOTAL</b>		33			950	29

<sup>1</sup>Educational Tour will be conducted in the month of December after completion of 3<sup>rd</sup> semester.



**Third Year (5th and 6th Semester)**

<i>Third Year: Fifth Semester</i>						
Code	Subject	Periods / Week			Marks	Credit
		L	T	S		
Theoretical Subjects						
CE31ZZ	Design of Structures I	3	0	0	100	3
ME31ZZ	Building Services II: HVAC, Lifts and Escalators	2	0	0	50	2
AP3101	Building Services III: Architectural Acoustics	2	0	0	50	2
AP3102	Evolution of Architecture IV	3	0	0	100	3
AP3103	Estimation and Specification	2	0	0	50	2
AP3130	Elective I : Core	2	0	0	50	2
	Sub total	14	0	0	400	14
Sessional Subjects						
AP3180	Architectural Design Studio IV	0	0	12	250	8
AP3181	Working Drawing I	0	0	3	100	2
AP3182	Estimation Practice	0	0	3	50	2
	Sub total	0	0	18	400	12
	TOTAL	32			800	26

<i>Third Year: Sixth Semester</i>						
Code	Subject	Periods / Week			Marks	Credit
		L	T	S		
Theoretical Subjects						
AP3201	Evolution of Architecture V	3	0	0	100	3
AP3202	Disaster Resistant Architecture	3	0	0	100	3
AP3203	Energy Efficient Architecture	3	0	0	100	3
AP3230	Elective II: Core	2	0	0	50	2
	Sub total	11	0	0	350	11
Sessional Subjects						
CE32ZZ	Structure Project	0	0	3	100	2
AP3280	Architectural Design Studio V	0	0	12	250	8
AP3281	Working Drawing II	0	0	3	100	2
AP3282	Interior Design Practice	0	0	3	100	2
AP3290	Educational Tour II <sup>2</sup>	~ 12 days			50	2
	Sub total	0	0	21	600	16
TOTAL		32			950	27

<sup>2</sup>Educational Tour will be conducted in the month of December after completion of 5<sup>th</sup> semester.

**Fourth Year (7th and 8th Semester)**

<i>Fourth Year: Seventh Semester</i>						
Code	Subject	Periods / Week			Marks	Credit
		L	T	S		
Theoretical Subjects						
AP4101	Theories of Architecture	3	0	0	100	3
AP4102	Project Management	3	0	0	100	3
AP4103	Professional Practice and Entrepreneurship Development	3	0	0	100	3
AP4104	Valuation of Real Properties	2	0	0	50	2
AP4130	Open Elective - I	3	0	0	100	3
	Sub total	14	0	0	450	14
Sessional Subjects						
AP4180	Architectural Design Studio VI	0	0	12	300	10
AP4181	Built Environment Monitoring Lab	0	0	3	100	2
	Sub total	0	0	15	400	12
	TOTAL	29			850	26

<i>Fourth Year: Eighth Semester</i>				
Code	Subject	Contact Periods	Marks	Credit
AP4290	Professional Training (Internship)	24 weeks duration	100	4
AP4291	Training Report	Examination only	50	2
AP4292	Training Viva-Voce	Examination only	50	2
	TOTAL		200	8

**Fifth Year (9th and 10th Semester)**

<i>Fifth Year: Ninth Semester</i>						
Code	Subject	Periods / Week			Marks	Credit
		L	T	S		
Theoretical Subjects						
AP5101	Principles of Human Settlements	3	0	0	100	3
AP5102	Housing	3	0	0	100	3
AP5103	Introduction to Urban Design	2	0	0	50	2
AP5104	Introduction to Architectural Conservation	2	0	0	50	2
AP5130	Open Elective - II	3	0	0	100	3
	Sub total	13	0	0	400	13
Sessional Subjects						
AP5180	Architectural Thesis Programming	0	0	3	100	2
AP5181	Architectural Design Project	0	0	12	300	10
AP5190	Grand Viva-Voce	Examination only			50	2
AP5131	Elective V: Core	0	0	3	100	2
	Sub total	13	0	18	550	16
	TOTAL	31			950	29

<i>Fifth Year: Tenth Semester</i>						
Code	Subject	Periods / Week			Marks	Credit
Sessional Subjects						
AP5280	Architectural Thesis I (1 <sup>st</sup> Review:100; 2 <sup>nd</sup> Review: 150; 3 <sup>rd</sup> Review: 200)	0	0	16	450	12
AP5290	Architectural Thesis II	Examination only			300	8
AP5291	Architectural Thesis Viva-Voce	Examination only			150	4
	TOTAL	0	0	16	900	24

## Indian Institute of Engineering Science &amp; Technology, Shibpur

## A Sample Grade Card

## THE GRADE CARD

Date: .....

Student Name :

Department Name:

Enrolment No. :

Following are the Marks and Grades obtained by the student in the ... Semester/Summer Term of the Academic session 20.....-20..... for which the examination was held in....., 20.....

Sl.	Paper Code	Subject name	Credit earned	Letter Grade
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
		Total credit earned		

SGPA:

CGPA:

Dy. Registrar (Academic)