

**Indian Institute of Information Technology  
Allahabad- (IIITA)  
Prayagraj (U. P.)-211 015**

***‘The Ordinance’***

**for**

**B.Tech. (UG) Programs**

**with**

**NEP Aligned Curricula**

**(Effective from A.Y. 2023-24)**

## **Preamble**

*This ordinance is an articulation of the Institute's commitment towards the design and delivery of its “Learning Outcome based Curriculum”, for all the B.Tech. Programs offered on campus, under the framework of “National Education Policy-2020”(NEP 2020), with the implicit features of ‘Multi-disciplinary Education, Reformative Continuous Assessment, and Choice based Credit System’. The proposed framework also makes available the honorable EXIT option for a student who wishes to gracefully exit from the program, after acquiring the stipulated credits upto a particular year, before the formal completion of the program, to which he/she is admitted, with the aspiration to earn the final degree. NEP 2020 envisages inclusive and multidisciplinary education, that aims at the holistic development of the learner, with the elegant culmination of his/her<sup>1</sup> learning, a meaningful employability, integrated entrepreneurial character and persistence in lifelong learning. The policy envisions the B.Tech. undergraduate degree to be of 4-year duration, with multiple entry and exit options within this period and with appropriate certifications e.g. a certificate after 1 year of study or a diploma after 2 years of study or a Bachelor of Science degree in Engineering after 3 years of study. The 4-year program will lead to a regular ‘Major’ Bachelor degree, with a ‘Mandatory Multidisciplinary Minor’, with an option of ‘Honors in the Major’s discipline OR an Interdisciplinary Minor’, for aspiring learners.*

*Some important features of NEP are:*

**Academic Bank of Credits (ABC):** *It is the platform developed by the National e-governance Division of the Ministry of Electronics and Information Technology, Government of India, having the facility/functionality of opening Academic Accounts for students and onboarding of eligible Higher Education Institutions (HEIs), in accordance with “The University Grants Commission (Establishment and Operation of Academic Bank of Credits in Higher Education) Regulations, 2021”. ABC will digitally store the academic credits earned by students from HEIs registered with ABC for awarding degrees/diplomas/certificates taking into account credits earned by students. ABC will ensure the opening, closure and validation of Academic Bank Accounts, credit verification, credit accumulation, and credit transfer, redemption for students.*

**Accumulation of Credits:** *Every student shall open an account in the ABC which will provide him/ her with a unique ID and will allow access to the Standard Operating Procedure. The Credits awarded to a student for the courses pursued in the University/Institute shall be accumulated in the Academic Bank Account of the student. The procedure for accumulation of credits earned, shelf life, and redemption of credits, would be as per the UGC (Establishment*

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*and Operation of ABC in Higher Education) Regulations, 2021 and their subsequent amendments. The validity of credits earned will be to a maximum period of seven years or as specified by the ABC.*

**Multiple Entry and Exit Points:** *These are the stages where the students may have options for entry and exit in the academic programs in HEI, and to be facilitated through the provisions created by the ABC scheme and Guidelines for Multiple Entry and Exit in academic programs offered in HEIs.*

**Learning Outcomes-based Curriculum Framework:** *It is a framework initiated by the UGC in 2018 for updating the CBCS curriculum to reflect the expected learning outcomes and academic standards that are expected to be attained by graduates of a program of study and holders of a qualification.*

**Choice Based Credit System (CBCS):** *It is the system that provides a wider choice to the student to select from the baskets of prescribed courses, in the program in terms of 'Electives', 'Minor', 'Honors' etc. Under the CBCS, the requirement for awarding a qualification (degree or diploma or certificate) is prescribed in terms of a minimum number of credits to be completed by the students, in a stipulated time frame.*

The present Ordinance applies to B.Tech. Degree Programs offered at IIIT Allahabad from A.Y. 2023-24 onwards.

## **1. Background:**

The IIIT Act 2014 provides for as follows:

- 17.(1) Subject to the provisions of this Act, the Senate shall be the principal academic body of the Institute and shall have the power to enact, amend, modify Ordinances, governing academic matters and the affairs and well-being of students in the Institute.
- (2)(c) to recommend to the Board about commencement of new programs and courses of study and undertake modifications therein;
- 35. Subject to the provisions of this Act and the Statutes, the Ordinances of every Institute may provide for all or any of the following matters, namely;
  - (a) admission of the students to the institute
  - (c) the conditions under which students shall be admitted to the degree or diploma courses and to the examination of the Institute, and shall be eligible for degrees and diplomas;
  - (e) to specify the academic calendar and approve grant of degrees, diplomas and other academic distinctions or titles;
  - (f) the conduct of examination

This Ordinance is accordingly framed in the exercise of the powers so vested in the Senate of the Institute with the following aims:

- 1) To set up a mechanism for Continuous Assessment (CA) of the students admitted to the B.Tech. Programs of the Institute;
- 2) To set up a mechanism for CA-based award of Degree/Diploma/Certificate, etc. to the students admitted to the B.Tech Programs, subject to the successful completion of Credits by the student(s) as specified thereto.

2. **Ordinance Number:** 2023/B.Tech./01

3. **Scope and Coverage:**

The undergraduate academic programs governed by this Ordinance shall be of ‘Four-Year’ duration with multiple entry/exit options within this period with appropriate ‘Titles of qualifications/certifications’, namely:

- a) **UG Certificate** in a Discipline upon successful completion of the First Year (Two Semesters); subject to other conditions specified herein.
- b) **UG Diploma** in a Discipline upon successful completion of the Second Year (Four Semesters); subject to other conditions specified herein.
- c) **Bachelor of Science** in Engineering in a Discipline upon successful completion of the Third Year (Six Semesters); subject to other conditions specified herein.
- d) **Bachelor Degree with ‘Major’** in the Core Discipline **AND** a **Mandatory multi-disciplinary ‘Minor’ within stipulated specified program credits** (OR an optional Double Major, within stipulated specified program credits, as and when the campus will offer it in future,) upon successful completion of the Fourth Year (Eight Semesters).
- e) **Bachelor Degree with ‘Major’** in the core Discipline **AND** a **Mandatory multi-disciplinary ‘Minor’ within stipulated specified program credits** and with an **OPTIONAL ‘Honors’** with additional credits (OR an optional Double Major, within stipulated specified program credits, as and when the campus will offer it in future), with additional specified credits in the core Discipline, at the successful completion of the Fourth Year (Eight Semesters).

This Ordinance shall apply to the students taking admission to the undergraduate programs from the Academic Session 2023-2024 and onwards.

Those students who were admitted to the undergraduate programs before the enforcement of this Ordinance shall continue to be governed by the existing CCLCAA Ordinance, 2018.

The curriculum for the 4-year undergraduate program shall be based on POLICY as envisaged in the NEP 2020 and as per senate decisions.

4. **Definitions, Terms & Conditions:**

- 4.0. **Program:** A program, hereinafter, shall mean an academic program leading to the award of a degree on its completion, by the regular student and BSc.(Engg.) or UG diploma or UG Certificate, for the exiting students. It comprises of a fixed set of program core

Courses, program elective Courses, open electives, multidisciplinary minor Courses, etc. with a **specified mandatory Credit requirement of 160 credits**.

- 4.1. **Discipline:** Reference to all disciplines in which a student has been admitted for BTech program.
- 4.2. **Course:** A course, also referred to as paper/subject is a component of a program, comprising one or a combination of some academic forms of instruction such as lectures, tutorials, laboratory work, fieldwork, outreach activities, project work, vocational training/internships, presentations, self-study, etc. or a combination of some of these, with the pre-decided conventional/novel assessment/evaluation schemes such as term papers, viva, seminars, assignments, etc. All courses shall have well-defined learning objectives and students' learning outcomes. Each course is to be identified by a unique course code, course title, teaching scheme and examination scheme.
- 4.3. **Credit:** It defines the quantum of workload for a course and decides the quantified engagement of the teacher and learner for a particular course. It also represents the quantum of self/informal/experiential learning, by the learner, as envisaged in NEP. e.g. for 4 credit courses with a teaching scheme of L-T-P-S = 2-1-1-1 corresponds to two hours of Lecture, one hour of Tutorial, two hours of Practical work, and two hour of Self/informal/experiential learning per week, to be engaged by the course teacher and to be attended by the learner. Credits for internship, project work, and self/informal/experiential learning are also to be assigned and interpreted in terms of commitment of time by the learner for a particular learning activity.
- 4.4. **Registration:** It has two components: Financial Registration and Academic Registration.
- 4.5. **Grade Point:** It refers to the quantification of the performance of a candidate in a particular course and stands in terms of a numerical weight allotted to each letter grade on a 10-point scale.
- 4.6. **Letter Grade:** It is an index of the performance of students in a course. Grades shall be denoted by letters A+, A, B+, B, C, D, and F.
- 4.7. **Semester Grade Point Index (SGPI):** It is a measure of the academic performance of a learner in a semester. It is the ratio of total credit points secured by a student in various courses registered in a semester to the total course credits taken during that semester. It shall be expressed up to two decimal places.
- 4.8. **Cumulative Grade Point Index (CGPI):** It is a measure of the overall cumulative academic performance of a learner over all semesters. The CGPI is the ratio of total credit points secured by a student in various courses in all semesters to the sum of the total credits of all courses in all semesters. It shall be expressed up to two decimal places.
- 4.9. **Percentage Marks:** It shall be (SGPI x 10) or (CGPI x 10).
- 4.10. **Transcript or Grade Card or Certificate:** It is based on the grades earned. A grade card shall be issued to all the registered learners after every semester. The grade card will

display the course details (code, title, number of credits, grade secured) along with SGPI of that semester and CGPI earned till that semester.

- 4.11. **Degree:** It refers to the 'B.Tech. Degree' which shall be conferred onto the learner in the Convocation ceremony, after successful completion of the program with specified mandatory 160 credits.
- 4.12. **Continuous Assessment:** It refers to the evaluation of a student spread over the entire semester in various constituent components of the prescribed course.
- 4.13. **Semester:** It refers to a period covering 16-20 weeks including teaching and examination.
- 4.14. **Course Drop:** It refers to an optional facility to be exerted by a student in case he wishes to drop a particular course for certain reasons/situations/conditions OR if the student doesn't attain minimum cutoffs defined for 3 parts viz. Midsem, Endsem, faculty assessment.
- 4.15. **Blank Semester:** It refers to a Semester in which a student either does not register for any course at the beginning of the Semester OR chooses to DROP all courses OR is compelled to DROP all the courses, as the case may be.
- 4.16. **Financial Registration:** Payment of all admissible fees.
- 4.17. **Academic Registration:** Selection of admissible courses selected through CBCS. Academic Registration will be allowed only after Financial Registration.
- 4.18. **Spill-Over Semester:** It refers to the additional semester(s) beyond the completion of prescribed normal semesters.
- 4.19. **Equivalent Course:** It refers to a course, which is projected as having the course component with a fairly large amount of commonality with the mapped earlier course. In case of dropped courses the respective department's Head may define it for respective student.
- 4.20. **Attendance:** It refers to the Physical personal presence in an academic activity session.
- 4.21. **Honorable Exit Options (as envisaged in NEP):** These refer to the Exit Options available to students after every academic year of the B.Tech Degree Program, which by this ordinance shall be of 4 years duration with 160 credits, with multiple exit options within this period with following certification namely:
  - a) **Bachelor of Science (Engineering):** shall refer to the B.Sc (Engg.) in a discipline upon the successful completion of three years (six semesters) and completion of 120 credits and with some additional courses of 06 credits. The respective department's Head may define it for respective student.
  - b) **Diploma:** shall refer to the UG Diploma (Engg.) in a discipline upon the successful completion of two years (four semesters) and completion of 80 credits and with some

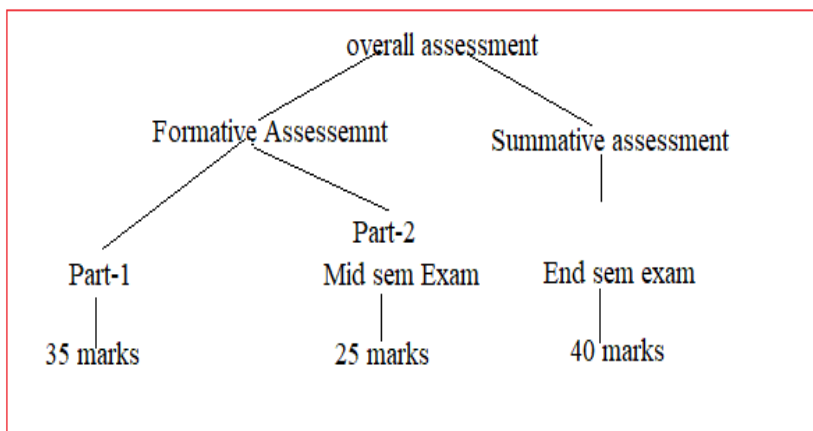
additional courses of 06 credits. The respective department's Head may define it for respective student.

- c) **Certificate:** shall refer to the UG Certificate (Engg.) in a discipline upon the successful completion of one year (two semesters) and completion of 40 credits and with some additional courses of 06 credits. The respective department's Head may define it for respective student.

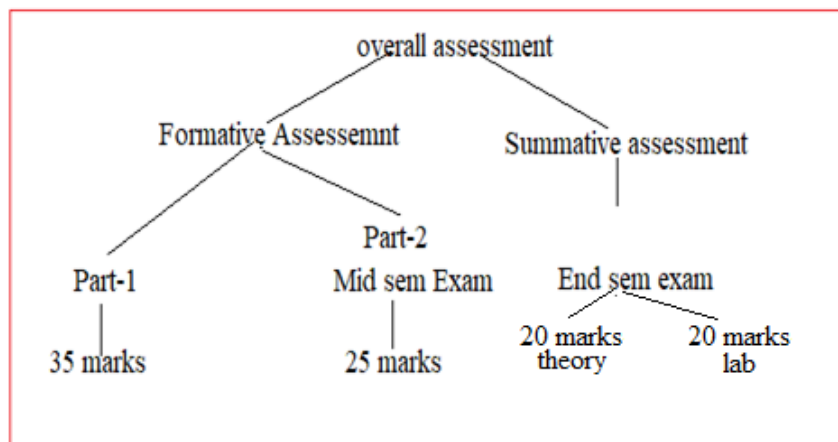
**4.22 Re-Entry:** It refers to the readmission of a student in the same OR Higher program in which he was admitted in IIITA or any other institute approved by the Senate. The respective department's Head may process such applications. The provisions shall be governed by the national regulations or Senate's guidelines in this regard.

### 5. Assessment Mechanism:

The assessment will have two components called **Formative** and **Summative** components. The formative component shall represent the continuous assessment comprising of 60 marks and shall be further divided into Part-1 and Part-2 of 35 and 25 marks respectively. While Part-1 of 35 marks is for teacher-driven activities ensuring continuous assessment of the learner by the teacher, such as conduct of Review test(s), Unit tests, Quizzes, Tutorials, Assignments, Practical, Surprise Tests, Project work, Term Work, Seminars/Discussions, and even Attendance, the Part-2 of 25 marks shall be exclusively allotted for mid-semester examination. The course instructor must announce the detailed breakup of Part-1 within one week of the commencement of class. Preferably the teacher should include self assessment and peer assessment mechanism. The summative component shall include an end-semester examination of 40 marks.



In the case of courses, where the lab component has 2 or more credits, the teacher may decide to keep the summative component will have an end-semester exam of 20 marks and lab exam of 20 marks.



- a) **Attendance Requirements:** At least 75% attendance is compulsory in every course individually, failing which the student shall be dropped. However the respective teacher may be allowed to design extra compensatory hours engagements for the students who are falling little short of this criteria.
- b) **Project and its assessment:** A Project is also treated as a Course for a team of 1-5 students and shall start from Problem Identification, Objective, Literature Survey, Methodology, Experimentation/ Software Design, Development, and Outcome together with the preparation of a Report. Though formative assessment of the progress shall be the prerogative of the project guide, the final assessment shall be carried out at the end of the semester. Major project of VIII semester may be completed as Internship (industry/academic).
- c) **Overall Assessment – How & When:** Total assessment shall be the weighted sum of the outcome of various components, subject to RELATIVE SCALING and revealed through an expressed statement of Grades/Equivalent Percentage, as stated on the Grade Sheet, on a Scale of 10, duly signed by a competent officer of the Admission Assessment and Award (AAA) Section of the Institute. The Grade Sheet shall be issued generally within one month of the declaration of the Final Result.
- d) **Major:** It refers to a student's main and core specialization of a program where he has been admitted by choice on the basis of his JEE (Mains) merit or equivalent and thus pursuing his B.Tech. Program. The Major shall correspond to a set of program specific courses aggregating to the stream of specialization program elective courses credits out of 160 credits B.Tech. Program.
- e) **Mandatory Minor (Multidisciplinary):** It refers to a set of few courses in a particular multidisciplinary stream (other than the one where the student has been admitted and pursuing his B.Tech program) that contributes to and complements the overall development of a student, beyond Engineering and Technology, complying with the globally recognized Graduate attributes. It shall correspond to a total of 15 credits.
- f) **Double Major (as and when the campus will offer it in future) :** The Double Major shall correspond to another stream of specialization and associated steam specific elective courses



credits weighing 15 Credits which may be chosen out of 160 credits B.Tech. Program in lieu of the Mandatory Multidisciplinary Minor.

- g) **Honors:** A bonafide student, eligible for the award of B.Tech. Degree with “HONORS” shall need to complete 15 additional credits from his own admitted core branch/discipline. Minimum 8 CGPI, No backlog, 8<sup>th</sup> Semester project must be an academic project and at least one research publication in Tier I/II conferences or in SCI Journals communicated or one patent filed are the essential conditions for Honors.
- h) **Distinction:** A bonafide student with a CGPI of 8.50 or above shall be awarded B.Tech. Degree with “Distinction”.
- i) **DROP:** When a student is unable to clear a course owing to the receipt of an ‘F’ grade (due to falling short of various cutoff criteria) then it will be treated as DROP. For such courses, re-registration in the subsequent semester is applicable.
- j) **Spill-Over Semesters:** A student can opt to choose, either to move at the prescribed pace of learning or set his own pace of learning, (i.e. at a slower pace), by utilizing the benefit of SPILL-OVER Semesters, as per below:
  - SPILL-OVER Semester(s) shall provide for the completion of re-registered courses.
  - Additional Semesters 9th to 12th shall be available as SPILL-OVER Semesters.

For being enrolled in these Semesters, additional fees shall be required to be paid. However, the fees shall be in proportion to the Credit Hours Enrolled for, in that particular Semester.

- j) **Ranks, Medals, etc:** Only such students, who complete the 160 Credits in the first 8 successive Semesters, shall be eligible to receive Ranks/Medals/Distinction etc., and be eligible for government-funded/institute-sponsored student fellowships/scholarships, freeships, etc.

## **6. Courses of Undergraduate Programs:**

The undergraduate program governed by this Ordinance contains the following course components:

- a) **Basic Science Courses:** They refer to the courses from the basic or natural sciences such as mathematics, physics, chemistry, and biology.
- b) **Engineering Science Courses:** They refer to a set of foundational engineering courses, that aim to impart fundamental knowledge in Engineering, to develop the scientific aptitude and attitude of the student towards the Engineering program.
- c) **Program Core Courses:** They refer to courses that represent the core of the program to which the student has been admitted and thus to be compulsorily studied by the student to complete the requirement of the program in the said discipline.

- d) **Program Elective Courses:** They refer to courses that can be chosen by the learner from a pool of courses that are very specific/specialized/advanced/supportive to the same discipline/subject of study where he is pursuing his B.Tech.
- e) **Open Elective:** It refers to a course that can be chosen by the learner from a pool of courses that may be very specific/specialized/advanced/supportive to a discipline other than core.
- f) **Multidisciplinary Minor Courses:** They refer to a series of domain-specific courses from various disciplines, other than the major discipline of studies, that would prove to enrich the learner without any restriction on the discipline including Engineering and Technology, complying with the globally recognized Graduate attributes.
- g) **Humanities Social Science and Management Courses:** They may consist of Ability Enhancement Courses (courses targeted for ability Enhancement), Indian Language courses, Entrepreneurship/Economics/Management Courses, Indian Knowledge System, and Value Education Courses (courses that will help develop all capacities of human beings - intellectual, aesthetic, social, physical, emotional, and moral in an integrated manner, includes subjects like Yoga, Sports, Healthcare, NCC, NSS, Ethics, Culture etc.). These courses may have only a practice component.
- h) **Vocational and Skill Enhancement Courses:** They refer to developing technical skills for specific purposes. Such courses offer practical knowledge in contrast to theoretical knowledge offered by the conventional formal education system. They may have only a practice component.
- i) **Research Methodology:** It refers to a course that entails the systematic approach for developing research aptitude among learners and describes the process of pursuing research.
- j) **Experiential Learning courses:** They include Internships, Projects, Community Engagement Activities/Field Projects
- k) **Co-curricular & Extracurricular Activities**
  - l) **NPTEL/SWAYAM/ONLINE Courses:** NPTEL is an outcome of a collective initiative by first-gen IITs in the country, in the form of online audio-video content for discipline-specific UG and PG courses, designed and delivered by IIT faculty. SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) is a MOOC Platform, developed indigenously by AICTE in 2016 to facilitate the hosting of online courses that could be accessed by anyone, anywhere, anytime for free of cost to achieve three cardinal principles of Education Policy viz. access, equity, and quality. A maximum of 40% of such courses in respective course types may be allowed out of which 5% may be under Self Study Credits.

## 7. Course Structure:

The course structure for B.Tech Programs comprises of program core, program elective, open electives, minor, value education course, humanities and social sciences and management courses, project etc. The Senate is empowered to approve and restructure the course curriculum

time to time. While any changes in the core courses needs approval from senate, the electives and other courses may be approved by department independently and should be reported to senate in the next meeting.

#### **8. Duration of the Undergraduate Program:**

Every student admitted to an undergraduate program shall be required to complete the program within a minimum period of 4 years semesters from the date of admission to the program and within a maximum period of 6 years for students belonging to General and OBC candidates while 7 years for students belonging to SC, ST and PWD candidates.

#### **9. Academic Registration:**

At the beginning of every semester, all the students shall be required to register for courses specified for that Semester of the program through CBCS after Financial Registration. A student can register for a maximum of 28 credits in a semester (backlogs courses +current semester courses). A student may drop the current semester courses to register for backlog courses. Future semester courses are not allowed for registration.

#### **10. Admission:**

Admission to the 4-year undergraduate program (currently in IT/ECE/IT-BIn) shall be through the centralized agency JoSAA/CSAB/DASA/SII. The Dean who is handling the Academic affairs shall process SII applications by defining a fair procedure with the consent of the Chairman Senate.

#### **11. B.Tech. Degree Program Layout:**

- a) In general, the B.Tech. Degree Program shall comprise of Eight Semesters, spread over a period of Four Academic Years. Each academic year shall commence from July/August. The odd semester shall commence in July/August and the even semester in December/January for each year.
- b) In general the B.Tech. Degree Program is a full-time residential program, BUT students may be allowed to stay off campus after due permission of the Director upon explicit request by their respective guardians. Fees etc in such cases shall be governed by rules as applicable.
- c) Institute follows the Continuous Assessment pattern in lieu of the routinely practiced Pass/Fail type end-semester based examination pattern. Continuous assessment pattern promotes a win-win situation for each student at his own pace and capability.
- d) The B.Tech. Degree Program is to be completed in a maximum period of 6 years for general and OBC candidates while 7 years for SC/ST and Pwd candidates, after which the student shall have to be exited, as per the scheme enunciated in the Ordinance.

- e) In order to be conferred with the B.Tech. Degree, a student has to earn at least 160 Credits, by enrolling himself in various Courses offered through CBCS.
- f) Students may apply for opting more credits in a regular/summer semester. The respective HODs may consider all such applications and arrive at a decision of accepting/Rejecting such requests depending upon the available resources.

## **12. General Layout of Course, Classification, Content Delivery:**

- a) Content delivery of a Course in the B.Tech. Degree Program shall be through, either or all, of the following Methods:
  - i. **Lecture (L)**- refers to Lecture Session(s) through classroom contact session. Denoted by "L".
  - ii. **Tutorial (T)** - refers to session(s) consisting of participatory discussion/desk work / brief presentations by students along with other novel methods that enable a student to efficiently & effectively absorb and assimilate the contents delivered in the lecture sessions. Denoted by "T".
  - iii. **Practice (P)** - refers to Practice/Practical sessions that consist of Hands-on experience/Laboratory Experiments/Field Studies/Case Studies/Minor/Major Projects, that equip the students to acquire the much-required skill component. Denoted by "P".
  - iv. **Self Learning/Informal/Experiential Learning (S)**: refers to credits earned through self study with the support of ONLINE material, consultations, library books, etc. The HOD or his nominee should conduct suitable assessment only thereafter such credits may be awarded.
- b) In terms of Credits, every One-hour session per week of L & T amounts to 1 Credit per semester, and a minimum of two-hour session of P or S per week amounts to 1 Credit per Semester.
- c) One semester generally corresponds to a period of 20 Weeks for Teaching Learning and Assessment Process completion, wherein minimum 15 weeks of teaching must be conducted.
- d) The concept of ‘notional learning hours’ and other provisions defined in National Credit Framework (NCrF) should preferably be followed while designing courses and conducting teaching as well as assessments.
- e) Each Semester shall have a predefined number of Courses and each Course will have predefined Credits.
- f) Each Course shall have a predefined layout in terms of L-T-P-S, with separate Integer Credits assigned to each of them.

### **13. Teaching-Learning Process:**

- a) **Medium:** The medium of instruction and examination is English. However, depending upon availability of resources a few courses may be offered in Hindi or regional courses. Maximum 5% credits may be earned through such courses in respective discipline.
- b) **Approval of courses:** The course structure for a program is fixed. Introduction of any course, along with its weight in terms of credits, requires approval by the Senate.
- c) **List of elective courses:** The list of electives under various specialization streams to be offered in a program is finalized before the beginning of the semester taking into consideration all the requirements and the recommendations of the Departments. The list is to be reported to the Senate.
- d) **Conduct of courses:** Each course shall be conducted by a faculty member as instructor. An instructor is responsible for conducting the course, setting question papers, holding quizzes, giving assignments, evaluating the performance of the students, awarding the grades at the end of the semester/summer term, and submitting the grades to the Examination Cell office within the prescribed time limit. If a course is conducted by more than one instructor, the instructor-in-charge shall be responsible for the coordination and overall conduction of the course.
- e) **Allotment of Teaching Assignment:** The instructors for all the courses, offered by a Department during the semester shall be designated by the concerned Departmental Head. If any other Department is also required to participate in teaching a particular course, the respective Head shall designate the instructor, for the same. The head may also propose to involve teachers from other reputed institutes as per the needs of the courses such that highest quality teaching may be achieved. The allocation, in such cases, shall be finalized by the Dean who is handling the Academics affairs. The teaching assignment in a semester for a particular instructor though may be commensurate with his cadre, every teacher shall be assigned normally three theory courses in a year. No elective course shall have a single-digit enrollment of learners, the elective course shall not be offered in such case.

### **14. Examination, Assessment & Evaluation:**

Examination plays an important role in the progression of a learner on the learning path and plays a significant role in deciding the quality of education. Evaluation, grading, and certification are based on the results obtained in examinations. Examinations therefore serve as checkpoints for both the learner and the external world and determine whether desired learning outcomes have been achieved or not. Written examinations play a major role in defining the level of learning the student is expected to achieve in the courses.

A student enrolled in various Programs of the Institute shall be awarded Letter Grades in each of his courses by the concerned faculty at the end of each semester based on the continuous assessment process. This assessment shall include appropriate weights for all evaluative exercises undertaken by the respective faculty during that semester, viz., mid-semester

examination, quizzes, assignments, tutorials, internal assessment, attendance in the course, end-semester examination, etc. Examinations will be divided into 3 parts comprising Formative and Summative parts as per the following table.

<b>Marks Distribution Table</b>		
Formative Assessment <b>MM=60</b>		Summative Assessment <b>MM=40</b>
<b>PART-1</b>	<b>PART-2</b>	<b>PART-3</b>
Includes quizzes, assignments, lab marks, attendance, etc. <b>MM=35</b>	Mid-Semester Examination (MSE) <b>MM=25</b>	End-Semester Examination (ESE) <b>MM=40</b>

MM= Maximum marks

- **PART-1:** Faculty will submit the marks of this component before the start of ESE. Marks of this part shall be shown to students, after each and every component of such continuous evaluation activity. MINIMUM 30% marks shall be the cutoff to this part failing which the students shall be dropped.
- **PART-2:** Faculty will submit the marks of this component maximum within a week's time after completion of the MSE assessment, after showing the answer sheet to students. MINIMUM 15% marks shall be the cutoff to this part failing which the students shall be dropped.
- **PART-3:** Faculty will submit the overall marks & grades of the course within a week's time after completion of the ESE assessment, after showing the answer sheet to students. MINIMUM 40% marks shall be the cutoff to this part failing which the students shall be dropped.

#### **14.0. Grading System:**

IIIT-A shall follow a relative grading system. Following are the grades that may be awarded based on performance of the student in the concerned subject(s)/courses.

1. **A+** grade for outstanding performance.
2. **A** grade for excellent performance.
3. **B+** grade for very good performance.
4. **B** grade for good performance.
5. **C** grade for satisfactory performance.
6. **D** grade for poor performance and is the lowest passing grade. Students with poor performance may be awarded this grade.
7. **F** grade stands for non-satisfactory performance.

The numerical grade points on a 10-point scale (known as Grade Points) are given in the following Table.

Grades, description and weight		
Grade	Description	(Grade point)
A+	Outstanding	10
A	Excellent	9
B+	Very Good	8
B	Good	7
C	Satisfactory	6
D	Poor	5
F	Non-Satisfactory	-

### Semester Grade Point Index

The SGPI is the weighted average of the grade points earned by a student in all the courses credited and describes his performance in a semester. If the grade points associated with the letter grades awarded to a student are  $g_1, g_2, \dots, g_n$  and the corresponding credits are  $c_1, c_2, \dots, c_n$ :

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

### 14.2. Cumulative Grade Point Index

The CGPI indicates the overall academic performance of a student in all the courses registered up to and including the latest completed semester. It is computed in the same manner as the SGPI, considering all the courses (say  $k$ ) over all the previous semesters, and is given by:

$$CGPI = \frac{\sum_{i=1}^k c_i g_i}{\sum_{i=1}^k c_i}$$

### 14.3. Examinations: Passing Criteria and Promotion to Next Year etc.

S. No	To Pass	Minimum Percentage (%)
1	Formative assessment	15% of Part-2 of formative assessment and 30% of Part-1 of formative assessment
2	Summative Assessment	40% of maximum marks of Summative Assessment

### **Course Drop:**

A Student can opt for a course drop or shall be dropped from a particular course only before summative assessment, subject to any of the following:

- a) If Formative Assessment earned marks % is below 15% in Part-2 of formative assessment and 30% in Part-1 of formative assessment:
  - The student will be deregistered from the course.
  - Will repeat the course in the next semester in case it is a core course.
  - For an elective course, a student may opt for another course.
- b) If Summative Assessment marks (End-Semester Examination (ESE)) < 40% of the Summative Assessment component:
  - Will be awarded an F grade
  - Will be given ONE TIME opportunity to appear in back paper examination in the upcoming summer semester, failing which the course shall be DROPPED. However, under special circumstances the Chairman Senate may award another opportunity for appearing in the next year back paper examination.
- c) In a particular course if Formative Assessment marks are  $\geq 30\%$ , the student may opt to voluntarily drop the course before the Summative Assessment. The student may also opt to drop due to any personal/family/medical reasons:
  - the student will be deregistered from the course.
- d) In case, attendance in a particular course is less than 75%:
  - the student will be deregistered from the course.

### **14.5. F-Grade and Opportunities to Pass the Course**

The opportunity to pass the course by appearing in back paper examinations shall be applicable as follows:

- a) ONCE in a year (Normally in Summer semester).
- b) Will be given ONE TIME opportunity to appear in back paper examination in the upcoming summer semester, failing which the course shall be DROPPED. However, under special circumstances the Chairman Senate may award another opportunity for appearing in the next year back paper examination.
- c) To appear in (N+1) year, a student must have passed atleast 80% of credits of (N-1) th year.
- d) To appear in (N+2) year, a student must have passed all credits of (N-1) th year

Whenever a student is permitted to appear in a dropped Paper (due to “F”), the new letter grade replaces the old letter grade in the computation of the SGPI. For the “F” grade, the back paper will be conducted only for 40 marks in total. The student's formative assessment marks will be retained.



#### **14.6. Attendance Requirements**

At the time of calculating attendance requirements, the following rules will be followed:

1. A student shall be deemed to have undergone a regular course of study in the Institute if he has at least 75% attendance in the lecture + tutorial + practical of the concerned course.
2. A maximum leave margin of 25% in each course includes approved leave for any reason (medical leave, participation in seminars/workshops/internships, etc).
3. A student who does not meet the above attendance requirement shall have his registration in the course canceled. The course will be treated as dropped.

In the case of a core course, the student should register for and repeat the course when it is offered next. The department may run the course in the immediate next semester or as per usual turn. However, to register in the immediate next semester, the concerned student should first see that there is no timetable clash and if a timetable clash is there then s/he will not be allowed to register as maintaining 75% attendance criteria may not be fulfilled by the student. For elective course, student may choose a different course in the next semester.

#### **14.7. Assessment-By Whom, Mechanism, Appeal:**

- a) Assessment of each Course shall be out of 100 Marks only, irrespective of the Credits assigned to it.
- b) Generally, the Faculty Member(s) who are the Course instructors shall evaluate the students enrolled in that particular Course. In special circumstances, the Chairman Senate may allow for the evaluation by others.
- c) The Components forming part of the assessment shall be announced by the concerned faculty at the beginning of the semester (during the first week of the semester) and shall then remain fixed uniformly for that entire class.
- d) For any objection to the marks secured in the Mid-Semester Exam (MSE), and End-Semester Exam(ESE), a student may appeal to the respective HoD, within three days of having seen the answer script, where afterwards the marks & grades scores shall be submitted to the AAA Section for compilation and publication of the result.

#### **15. Assessment- Date, Time & Venue:**

- a) The Mid-Semester Examination and End-Semester Examination will be centrally conducted by the AAA Section.
- b) The general period of assessments shall be declared in advance by the Office of the Dean (Academic) through the Academic Calendar. The exact dates for assessment of each of the course(s) shall however be communicated separately later on.

- c) Question Paper set by the respective Faculty Member(s) shall be submitted to the AAA Section.

**16. Result Preparation Declaration, Grade Sheet, Transcript, etc.:**

- a) Marks scored in Formative and Summative components and grades shall be communicated by the concerned Faculty to the AAA Section.
- b) Semester result compilation and declaration shall be done by the AAA section at the end of the semester.
- c) The Semester Grade Sheet shall be issued by the AAA Section under the seal and signatures of the AR/DR/JR(AAA) Section, as the case may be. This shall be the only valid document in this respect.
- d) The Semester Grade Sheet shall depict the Courses registered in. The dropped courses will not be mentioned in the Grade Sheet.

**17. Branch Change:**

1. This facility can be availed by such students who have been admitted to a four-year B.Tech. Degree Program of the Institute, BUT desire to change into another B.Tech. Degree Program of Four Years duration only, offered by a different department, having the same admission criterion.
2. Available only once for a batch and that too at the end of the first semester only.
3. A call to this effect shall be made by the AAA Section of the Institute, after the First Semester results of the B.Tech. Degree Program is declared and the desirous student shall have to apply for the same, to be considered for the Branch Change option.
4. Applying for a branch change option does not guarantee being allowed the change.
5. Option shall be deemed to have been availed off, once the acceptance to that effect has been given by the student to the AAA Section. The option thus availed off is irreversible.
6. A student shall be eligible to apply for a Branch Change option, only upon successful compliance with the following conditions:
  - The student should have appeared and successfully cleared all courses of the first Semester of the B.Tech. Degree Program in which he was initially enrolled in.
  - The student should NOT have dropped any course of the first semester.
  - The student MUST have scored an SGPI greater than or equal to 7.50, based upon all prescribed Credits for the respective first Semester.
7. The conduct of the student in the first Semester at the Institute should be unblemished.

8. In case a student is found involved in any case of misconduct/indiscipline, during the first semester, he may be debarred from being considered for Branch Change, despite his qualifying the other academic criterion, as stated herein above.
9. The availability of a Branch Change option is subject to the availability of seats in the target Branch. The maximum number of total seats available in any program equals the sanctioned seats in that program.
10. The branch change option shall be allowable upon the consideration of academic merit, after taking into consideration the conduct of the student, AND shall be independent of the category of the student. No reservation rules shall therefore apply under this option.
11. In case of a "tie" of first semester marks, the decision shall be taken based upon the overall "All India Rank" of the students concerned in the qualifying entrance examination (presently the JEE Mains Examination), based upon which the initial admission was granted into the B.Tech. Degree Program. Students having rank higher than the other shall be given the option first. (Ex. - Amongst the AIRs 2100 and 2200, rank 2100 is treated as the higher rank).

**18. Withdrawal of Degree/Diploma/Certification:**

Consequent upon being convinced, following an inquiry, the Senate may resolve to withdraw the Degree/Diploma or any other Certification provided by the Institute. The aggrieved may however prefer for a review of such decision by the Senate, citing cogent reasons for review, or go in for an appeal to the Board of Governors of the Institute.

**19. Other conditions:**

- a) Students, who are SUSPENDED from the Institute, should be treated as DROPPED (if the suspension period leads to it) for the relevant Semesters of SUSPENSION.
- b) The time period of the Semesters, which are treated as DROPPED on account of SUSPENSION, shall also count towards the maximum period countable for completion of the Degree Program, shall be inclusive of SPILL Over Semesters, and the DROPPED Semesters together (whether on account of availed DROP or DROP owing to SUSPENSION(s)).
- c) Recommendations for Fee Waiver/Making Provisions: The director may give the waiver depending on the merit and situation of the case.
- d) Power to remove the difficulties: For the matter(s) NOT covered herein above or for unforeseen circumstances, but arising during the course of the implementation of the above ordinance, the Chairman Senate shall be authorized to remove the difficulties and decide upon the matters. The same shall be reported in the next meeting of the Senate, for its consideration.

- e) This new modified Ordinance is also subject to corrigenda/addenda from time to time, to make it more relevant and effective for the quality academics on campus. Minute implementation and operational details, which are left out in this ordinance, will be released in the form of a comprehensive document to be titled as “Academic SOPs-2023”, being articulated separately.

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