

**Regulations  
of  
B.Tech. Degree Programme  
Academic Year 2025-26 onwards**



**Approved by the Board of Governors in its meeting held on 13<sup>th</sup>  
December 2024 under Resolution number BOG/MIN/67/2024/08**

**राष्ट्रीय प्रौद्योगिकी संस्थान  
जमशेदपुर, भारत  
NATIONAL INSTITUTE OF TECHNOLOGY  
JAMSHEDPUR, INDIA  
2025**

NATIONAL INSTITUTE OF TECHNOLOGY JAMSHEDPUR  
JAMSHEDPUR, INDIA

PREAMBLE

*National Institute of Technology Jamshedpur offers undergraduate programmes through its various Departments with a vision to be one of the premier technical institutions for its academic excellence and innovative research to meet the future needs of the society. The Institute has set a mission to build conducive environment for learning and creativity apart from training its students to become technically competent professionals and socially responsible citizens. Further, the Institute is keen on implementing the National Educational Policy (NEP)-2020 in its higher education structure as per the present needs in the society.*

*To that end, the rules and regulations framed have taken care of philosophy of higher performance ethics in pedagogy work at the Institute. Nevertheless, these regulations, duly approved by the Board of Governors in its **67<sup>th</sup>** meeting held on **13<sup>th</sup> December 2024** vide **BOG/MIN/67/2024/08**, shall supersede all the prior sets of regulations/manuals for the undergraduate programme of the Institute and shall be obligatory on all undergraduate students.*

*In light of the periodic amendments in regulations, appropriate care shall be taken to avoid any unfair circumstances inadvertently created for the students admitted in earlier years.*

# Contents

1 Introduction.....	4
2 Departments .....	6
3 Programmes .....	6
4 Academic Year (AY) .....	6
5 Academic Calendar .....	6
6 Procedure for Admission .....	7
7 Refund Policy.....	8
8 Course Structure.....	8
9 Registration .....	11
10 Promotion Rules.....	12
11 Entry and Exit Options.....	12
12 Minor Degree .....	13
13 Honors Degree .....	14
14 Attendance .....	14
15 Grading System.....	15
16 Performance Assessment .....	20
17 Examinations.....	22
18 Residence .....	26
19 Industrial Training and Field Work .....	27
20 Degree Requirements.....	27
21 Withdrawal from the Institute.....	28
22 Termination from Programme .....	29
23 Institute Medals and Prizes .....	29
24 Merit-cum-Means (MCM) Scholarships.....	30
25 Conduct and Discipline.....	31
26 Relaxation .....	32
27 Amendments .....	33

## 1 Introduction

The objectives of the Undergraduate (UG) Programme at the National Institute of Technology Jamshedpur (NIT Jamshedpur) are:

- To provide the highest quality education in science, engineering and technology.
- To produce competent, creative and imaginative engineers and technologists with a free, fighting, and team spirit.
- To encourage free and objective enquiry in different disciplines.
- To inculcate values and ethics.
- To encourage the spirit of entrepreneurship.
- To make a significant contribution towards the development of skilled and technical manpower, and
- To create an intellectual reservoir to meet the growing demands of the nation.

The UG programmes at NIT Jamshedpur are designed to achieve the above objectives and to inculcate among students' human values and ethics, concepts, technical and intellectual skills, courage and integrity, awareness and sensitivity to the needs and aspirations of the society.

The provisions contained in these regulations will govern the conditions for imparting courses of instruction, conducting examinations and evaluation of students' performance in the 4-year courses in Science/Engineering/Technology leading to the award of B.Tech/B.Tech (Hons) degree with minor specialization if opted by the student.

These regulations shall be effective from the start of the Academic Year 2025-2026.

In order to implement the rules and regulations in an effective and transparent way, the involvement of departmental and institutional level bodies is very much essential. Following are the committees for the purpose:

### 1.1 Departmental Undergraduate Committee (DUGC):

Each academic department shall constitute a five-member committee whose Chairman shall be the Head of the Department (HoD) and faculty advisors of each batch.

The DUGC shall:

- *Advise the students about their curriculum.*
- *Advise them about academic and career opportunities.*
- *Monitor the attendance of the students.*
- *Monitor the progress of academically weak students.*
- *Handle any problem faced by students in their academic programmes.*

### 1.2 Institute Undergraduate Committee (IUGC):

The Institute UG Committee consists of one representative (Chairman DUGC) from each of the academic departments and four additional members of whom two are Senate representatives and two UG students (from third and fourth year), nominated for the purpose. The Chairperson of the IUGC shall be Dean (Academic), who shall convene and preside over the meetings.

The IUGC has jurisdiction in the following matters concerning the UG programmes of the Institute:

- *Formal approval of new courses of instruction.*
- *Desirable modifications of courses already approved.*
- *Credit valuation of courses.*
- *Recommending the degrees*

- *Evaluation of academic performance, and*
- *Such other related matters as may be referred to it by the Senate.*

Functions of the IUGC consist primarily of general policy determination, coordination and review, but the Senate retains the power of final review and decides such matters as may be brought in appeal before it. In discharging its responsibilities, the IUGC shall make full use of the appraisals and recommendations of the various academic departments concerned. The IUGC has two standing sub-committees, namely Curriculum Committee (CC) and Academic Performance Evaluation Committee (APEC), and is assisted by the Departmental Undergraduate Committees (DUGCs).

The Chairperson of IUGC nominates the Conveners of both CC and APEC. These Conveners, in consultation with the IUGC Chairperson, form their respective committees consisting of five faculty members drawn from amongst the IUGC members. The CC oversees the core curriculum, coordinates its various facets and performs all other relevant functions. The APEC evaluates the academic performance of the undergraduate students to make recommendations regarding;

- i. their further programme of studies and
- ii. action to be taken in the case of deficient students. Both these committees shall make their recommendations to the IUGC.

### **1.3 Academic Standing Committee (ASC)**

Some decisions are required to be taken urgently on academic issues. These urgent academic issues require deliberation in order to justify and satisfy normal justice. Dean Academic alone may not be competent enough to recommend certain issues for approval to Chairman Senate. The Academic Standing Committee (ASC) will deliberate on such urgent issues and suggest Director/Chairman, Senate for needful. Such decisions of Chairman, Senate can be reported to the Senate. Only Chairman, senate can refer any matter to Academic Standing Committee. The Academic Standing Committee shall consist of

- Dean Academic - Chairman
- Registrar
- Dean (Planning and Development)
- Dean (Faculty Welfare)
- Dean (Research and Consultancy)
- Dean (Student Welfare)
- Dean (Industry and Alumni Relations)
- FI-Examination
- Associate Dean Academic, Convenor-Member

### **1.4 Office of the Dean Academics**

The office of the Dean Academics (DA), called the Academic Section, is responsible for the implementation of the decisions taken on academic matters by the Senate, DUGC, IUGC and ASC. It (i) receives, processes and maintains all records relating to the undergraduate programmes including curricula, courses offered, academic calendar, registration, leave, examinations, grades and award of degrees and prizes, (ii) disseminates information pertaining to all academic matters, (iii) issues necessary memoranda/orders, (iv) acts as a channel of communication between the students, instructors, departments/ interdisciplinary

programmes, DUGC, IUGC and ASC. The undergraduate (UG) office of the Academic Section assists the IUGC and ASC in their tasks

## **2 Departments**

The various departments at NIT Jamshedpur and their three -letter codes are given below:

1. Department of Civil Engineering (DCE)
2. Department of Computer Science and Engineering (DCS)
3. Department of Electronics and Communication Engineering (DEC)
4. Department of Electrical Engineering (DEE)
5. Department of Mechanical Engineering (DME)
6. Department of Metallurgical and Materials Engineering (DMM)
7. Department of Production and Industrial Engineering (DPI)
8. Department of Chemistry (DCH)
9. Department of Physics (DPH)
10. Department of Mathematics (DMA)
11. Department of Humanities (DHS)

## **3 Programmes**

Undergraduate B.Tech/B.Tech (Hons) degree programmes are offered in the following disciplines and their two-letter codes are given below:

1. Civil Engineering (CE)
2. Computer Science and Engineering (CS)
3. Electronics and Communication Engineering (EC)
4. Electrical Engineering (EE)
5. Mechanical Engineering (ME)
6. Metallurgical and Materials Engineering (MM)
7. Production and Industrial Engineering (PI)
8. Engineering and Computational Mechanics (CM)

The provisions of this Rules and Regulations shall also be applicable to any new disciplines that are introduced from time to time and added to the above list. The Board of Governors (BoG) may, on the recommendation of the Senate, modify any or all parts of these Rules and regulations at any time considered appropriate by the Senate.

## **4 Academic Year (AY)**

The Academic Year (AY) is divided into two semesters, an Autumn Semester (July – December) also called as “Odd Semester” and a Spring Semester (January to June) also called as “Even Semester”. In an academic year, all odd semesters should be in the Autumn Semester and all even semesters should be in the Spring Semester.

## **5 Academic Calendar**

An academic calendar for each semester, i.e., (Autumn & Spring) separately should be prepared and circulated by the academic section.

The academic activities for each semester, dates for semester registration and fee payments, classwork, mid-semester and end-semester examinations, dates for supplementary examinations, inter-semester breaks, dates for Extra Academic Activities (EAA), holidays, etc. shall be laid down in the academic calendar.

The academic calendar shall strive to provide information for a total period of about 80 to 90 working days in each semester which includes mid-semester and end-semester examinations. The academic calendar should be approved by the senate before it starts implementing.

## **6 Procedure for Admission**

- 6.1 Admission at National Institute of Technology Jamshedpur will be made in accordance with the instructions received from the Ministry of Education (MoE) Government of India and based on the nation wise counselling through JOSAA/CSAB. Reservation policy is adopted as per the guidelines issued by MoE, Government of India.
- 6.2 Admission to all UG courses will be made in the Autumn Semester of each session at the First-Year level, through a Joint Entrance Examination (JEE Mains) conducted by the NTA under the supervision of Joint Admission Board (JoSSA)/CSAB.).
- 6.3 A limited number of admissions are offered to Foreign Nationals and Indians living abroad in accordance with the rules applicable for such admission issued by MOE, Government of India under the scheme of Direct Admission of Students Abroad (DASA).
- 6.4 All selected candidates for admission to B.Tech shall enroll themselves by paying requisite fees and submitting the filled-up admission form.
- 6.5 If any time after admission, it is found that a candidate has not fulfilled all the requirements in stipulated time; the admission of the candidate shall stand cancelled.
- 6.6 Besides the successful JEE Mains candidates, specified number of foreign nationals and Indian nationals residing abroad for at least a period of 5 years, satisfying the norms approved by the Senate and selected by the Joint Admission Board in accordance with the policy laid down by the Government of India (GoI) may be admitted directly to the first year of any of the courses covered by this regulation.
- 6.7 A few admissions are offered under the Cultural Exchange Fellowship Programme of the GoI, administered by the Indian Council of Cultural Relations (ICCR)/Ministry of External Affairs (MEA)/Study-In-India, New Delhi. For these fellowships, the candidates are required to apply through the Indian High Commission/Embassy in their respective countries.
- 6.8 Reservations in admission shall be given as per guidelines framed by MoE, Government of India from time to time.
- 6.9 All students admitted to any of the courses shall be required to pay prevalent tuition and other fees, at the time of joining the Institute and also in subsequent semesters, as prescribed by the Institute till they are on roll.
- 6.10 The Institute reserves the right to cancel the admission of any student and ask him/her to discontinue his/her studies at any stage of his/her course on grounds of unsatisfactory academic performance, irregular attendance in classes, indiscipline or any misconduct.
- 6.11 All relevant details and admission procedure is available at Institute's website: [www.nitjsr.ac.in](http://www.nitjsr.ac.in).
- 6.12 Currently, Institute does not offer a lateral entry/admission scheme for admitting polytechnic graduates directly into the second year of the B.Tech program. However, if deemed necessary in the future, the Institute may consider implementing such a scheme, subject to approval from the Senate and the Board of Governors.
- 6.13 Under special cases, the Institute may admit students to a course through transfer from other NITs. Such admissions may occur at any level deemed suitable, except for the first

year. However, such cases require approval from the Board of Governors through the Senate.

## **7 Refund Policy**

If a student chooses to withdraw from the UG programme in which he/she is enrolled, the NIT Jamshedpur will follow the following steps for the refund of fees paid by the student.

- 7.1. If a student withdraws from the Institute before the Registration/Reporting at Admitted Institute (according to JOSAA/CSAB/DASA time schedule available in respective website), fee paid shall be refunded after deducting a processing fee of Rs. 1,000/-.
- 7.2. If a student withdraws from Institute after the Registration/Reporting at NIT Jamshedpur (According to JOSAA/ CSAB/ DASA time schedule available in respective website), he/she needs to submit a withdrawal request through a completely filled-in application form as prescribed by the Institute along with the No-Dues form (available at Institute's website), verified from all the concerned Office/Dept./Section. Only after the approval of the same, the following deposits may be refunded after deduction of dues, if any:
  - a. Institute Caution Money
  - b. Hostel Security and Mess Security (if applicable).
- 7.3. The refund will be made after the completion of the entire admission process and after the receipt of the Admission Fees from the CSAB/DASA respectively (i.e., Fees submitted directly to the CSAB/DASA by the student).
- 7.4. Also, the Institute will follow the Refund rules for Fees as per the MoE guidelines notified from time to time.
- 7.5. In case of natural or accidental death and major causalities of the student, the refund rules/clauses shall be applicable to the extent as given above.
- 7.6. The above rules are applicable for entry-level admissions in UG.
- 7.7. In case of natural or accidental death and major causalities of the student within the 15 days of semester registration, the Total semester registration fee will be refunded.

## **8 Course Structure**

- 8.1 The duration of the courses leading to the B. Tech/B. Tech (Hons) degree will be of Four (4) years which includes with minor specialization.
- 8.2 The curricula for the different degree programmes as proposed by the respective departments and recommended by the Departmental Undergraduate Committee (DUGC) and Board of Studies (BoS) shall have to have the approval of the Senate. The departments shall prepare the syllabus of each subject containing the scope of studies and detailed instructions to be imparted which must have the approval of the Senate.
- 8.3 There will be BoS for every Department. BoS functions will include framing the content of various courses, reviewing and updating the content and introducing new courses of study on a regular basis.
- 8.4 The composition of the BoS is as below:
  - The Head of the Department as Chairperson.
  - All Professors / Associate Professors / Assistant Professors of the Department
  - Members nominated by the Dean (Academic) on the recommendation of the Head of the Department as given below:

- a. One Professor / Associate professor from Physics, Chemistry, Mathematics, Humanities and allied Departments nominated by respective Head of the Department.
  - b. One Professor (subject expert) from IISc/IITs/NITs.
  - c. One subject expert with at least 10 years of experience in the relevant field from a Central/ State Organization/ R&D labs or from a reputed Industry.
  - d. One Alumni with at least 10 years of experience in the relevant field from a reputed R&D/Industry.
- Two students' representatives from the department.

8.5 The BoS shall be constituted by the Department for a period of two years. The Board of Studies can advise the Department to prepare, revise or update content of courses as per the timely guidelines stipulated by the Senate/UG regulations.

8.6 A joint BoS shall be conducted by the Dean (Academic) for maintaining the uniformity in the BoS approved course structure of all departments.

8.7 The duly considered recommendations of the joint BoS will be submitted to the Senate for consideration and approval.

8.8 Each and every subject/course of UG programme shall have a unique code approved by the senate on the recommendation of the department/Centre.

8.9 Each subject has a six-digit code like given below:

DEPARTMENT		PROGRAMME	SEMESTER	SUBJECT NUMBER	
X	X	X	X	X	X

First two characters from left represent Code of the Department which offers the course, third character from left represents Programme level (1 for UG), Fourth character from left represents semester and last two characters from left represent subject number offered by the department in particular semester.

For example: CS1101 represents the course code of the Course offered by the CSE department in first semester with subject code "01".

COURSE CODE

DEPARTMENT		PROGRAMME	SEMESTER	SUBJECT NUMBER	
C	S	1	1	0	1

8.10 All Subjects shall have lecture-tutorial-practical/project component (**L-T-P**) to indicate the contact hours. '**T**' and '**P**' components of a subject may be void. All subjects shall have a credit count '**C**'. Teaching of subjects shall be reckoned in terms of credits. The details given below:

Type of Course	L (Lecture)	T (Tutorial)	P (Practical)	C (Total Credit)	Tentative No. of class hours/week
Theory	3	0	0	3	Theory Class: 3 hours/ Week
					Tutorial Class: 0 hours/ week
					Practical Class: 0 hours/ week
Theory	3	1	0	4	Theory Class: 3 hours/ Week
					Tutorial Class: 1 hour/ week
					Practical Class: 0 hours/ week
Practical	0	0	2	1	Theory Class: 0 hours/ Week
					Tutorial Class: 0 hour/ week
					Practical Class: 2 hours/ week

Practical	0	0	3	2	Theory Class: 0 hours/ Week
					Tutorial Class: 0 hour/ week
					Practical Class: 3 hours/ week
Both Theory and Practical	1	0	2	2	Theory Class: 1 hours/ Week
					Tutorial Class: 0 hour/ week
					Practical Class: 2 hours/ week
Both Theory and Practical	3	0	2	4	Theory Class: 3 hours/ Week
					Tutorial Class: 0 hour/ week
					Practical Class: 2 hours/ week
Both Theory and Practical	2	0	2	3	Theory Class: 2 hours/ Week
					Tutorial Class: 0 hour/ week
					Practical Class: 2 hours/ week

8.11 The minimum course work requirements shall be different for the respective degree courses. The requirements shall be as detailed out in the curriculum and syllabi for each of the disciplines as approved by the Senate. The minimum requirement for various categories shall as follows:

S. No	Programme	Composition	Credit Distribution				Remarks
			Basic Degree	Minor	Honors	Total	
1	B.Tech.	B.Tech. Regular	160-170	-	-	160-170	Course Structure in line with NEP 2020
2	B.Tech. with Minor	B.Tech. + Minor	160-170	16-20	-	176-190	Course Structure in line with NEP 2020 with multi-discipline learning and for additional skill-set
3	B.Tech. Honors	B.Tech. + Honors	160-170	-	16-20	176-190	Students with a minimum of 7.5 CGPA without any "F" Grade/backlog are eligible for B.Tech Honors degree.

8.12 The overall weightage of courses for the different UG programmes shall as follows:

Course Category	Courses	No. of Credits	Weightage (%)
Institute Core Courses (ICC)	09	26	16.25%
Basic Science and Management Courses (BSMC)	04-06	12-14	7.5%
Programme Core Courses (PC)	20-25	60-62	37.5%
Programme Electives (PE)	10-15	35-36	21.85%
Open Electives (OE)	04-06	12-14	7.5%
Industrial Project/ Internship*	02-06	10-12	6.25%
SWAYAM/NPTEL ONLINE Course (OC)	02-04	05-06	3.12%
Mandatory Learning Course (MLC)	04	0	
Total		160-170	
Minor (Optional)	05-07	16-20 Additional credits	

\*The credit of major Project/Internship in 8<sup>th</sup> Semester will be of 8 credits only.

Note: The basket of courses under ICC, BSMC and MLC category will be timely notified by the Dean Academic in coordination with all departments after completion of BoS.

8.13 At the end of the first year, students may change branches based on merit and available seats in their respective categories. Students who are promoted must also complete the branch-specific courses offered in the first year of their new branch in addition to their

regular third-semester subjects. If a student has already completed any branch-specific course from the first year in his/her previous branch, he/she will not be required to study those subjects again in 3<sup>rd</sup> semester.

- 8.14 The major/minor project along with credits and duration shall be defined by the department duly approved by the Senate. The credits can be viewed as per the applicable teaching scheme of respective B.Tech programme.
- 8.15 Students may take audit courses during his/her degree with the permission of the instructor. A student may apply for changing a credit course to an audit one within one week of the end of the mid-semester examination, based on the circulation/notification from the office of Dean Academics. Audit is not allowed in any first-year course and also for any core course. The credit of the courses which are audited will not be counted in the final degree requirements.
- 8.16 There should be 3-5 Course Outcomes (COs) in each course.
- 8.17 Adding and Dropping/Withdrawal of Course(s): The addition and dropping/withdrawal of course may be accomplished subject to the following conditions:
- i. The choice of elective/ open elective courses will be based on the pre-registration basis, which has to be completed well in advance before the semester registration.
  - ii. There may be a provision for adding/ dropping/ switching of elective/ open elective courses within 2 weeks of commencement of semester only, with the concerned from department. After that no such above modification will be entertained.
  - iii. There may be a minimum of 10 students in the class to conduct any elective courses. However, head of the department may be empowered to take the final call based on the need and situation.
  - iv. There may be a minimum 10 students (from other department) to conduct any open elective course. However, head of the department may be empowered to take the final call based on the need and situation.

## 9 Registration

The office of the Dean (Academic) coordinates the student's semester registration process. All UG students must register in each semester for the courses to be pursued by them as per the programme and as notified in the academic calendar.

- 9.1 Every student of the B.Tech course is required to be present physically and register in their respective department at the commencement of each semester on the day fixed and notified in the Academic Calendar.
- 9.2 Registration of students for First (Autumn) Semester will be centrally organized by the Academic Section of the Institute.
- 9.3 A student who does not register on the day announced for the purpose may be permitted to register late in consideration of any compelling reason, but only within the next 5 (five) working days on payment of a prevalent additional late fee as prescribed by the Institute. Normally, no late registration shall be permitted after the scheduled date except in special cases with the permission of Chairman, Senate.
- 9.4 Minimum and Maximum Credit a student can register in a semester is as follows:

Credits to be Registered	Condition	No. of Credits
Minimum Credits	--	12
Maximum Credits	Inclusive backlog subject registered.	32

- 9.5 From the third (Autumn) Semester onwards in any Autumn (Spring) Semester:
- Students who have passed in all the subjects of previous Autumn (Spring) semesters shall register for subjects as specified in the curricula of the concerned discipline.
  - Students who have failed in one or more subjects even after the supplementary examination (henceforth called backlog subjects) in the previous Autumn (Spring) Semesters must first register in as many of these backlog subjects as are offered in that Semester before registering in any new subject. However, total credits will be decided by DUGC (not more than 32).
  - The backlog students should attend the classes of backlog subjects if time-table adjustable else the student need to interact with the concerned subject teacher for subject related discussion at least 10 hours, 15 hours and 20 hours for 2 credit, 3 credit, and 4 credit courses, respectively, considering the convenient time.
  - Students who have a backlog in a breadth or an elective subject may register in another breadth or an elective subject from and within the same group of electives offered in the Semester concerned.
- 9.6 Only those students will be permitted to register who have:
- Cleared all Institute and Hostel dues of the previous semesters.
  - Paid all prescribed fees for the current semester, and
  - Not been debarred from registering for a specified period on disciplinary or any other grounds.
- 9.7 With the permission of the Faculty Adviser, a student may be allowed to change his/her registration of subjects within one week from the day of registration.

## 10 Promotion Rules

The promotion rules are as follows:

- From 1<sup>st</sup> Year to 2<sup>nd</sup> Year: To be able to register in the 2<sup>nd</sup> Year 1<sup>st</sup> Semester (3<sup>rd</sup> Semester), a student must not have more than four backlog papers at the end of first year after 1<sup>st</sup> Semester, 2<sup>nd</sup> Semester and supplementary examinations put together.
- From 2<sup>nd</sup> Year to 3<sup>rd</sup> Year: For promotion to 3<sup>rd</sup> year, a student should have (i) Cleared all the Courses of 1<sup>st</sup> Year including EAA and (ii) passed, with P or better Grade in all subjects or not have more than four backlog papers at the end of 2<sup>nd</sup> Year.
- From 3<sup>rd</sup> Year to 4<sup>th</sup> Year: For promotion to 4<sup>th</sup> year, a student should have (i) Cleared all the Course Work requirements of 1<sup>st</sup> Year, 2<sup>nd</sup> Year and (ii) passed, with P or better Grade, in all subjects or not have more than four backlog papers at the end of 3<sup>rd</sup> Year.

## 11 Entry and Exit Options

For the students who want to opt for multiple entry/exit option for the Programme, the rules are as follows:

- 11.1 Students may be allowed to re-enter the Programme within Three (3) years from the date of leaving the Institution. Total exclusive/effective study duration of the Programme shall

be as Eight (8) years. However, under extraordinary situation, a suitable decision may be taken by the Senate.

- 11.2 As per NEP 2020, multiple exit stages with some kind of authorized exit certificates may be introduced by the senate.
- Any Undergraduate student want to quit the programme after 1<sup>st</sup> year by earning minimum 40 credits will be awarded a certificate.
  - Any student quits the programme after 2<sup>nd</sup> year by earning minimum 80 credits will be awarded a diploma degree.
- 11.3 Academic Bank of Credits (ABC):  
Students belonging to eligible Higher Educational Institutions (HEIs) can avail the facility of ABC Credits obtained by undertaking courses in HEIs during or after the Academic Year 2024-25 alone are eligible for credit transfer, credit accrual and credit redemption through ABC. Students shall be required to earn at least 50% of the credits from the parent Institution that she/he is enrolled for a programme.
- 11.4 Part-Study/ Exchange at IITs/NITs/IIITs/GFTIs/Overseas Institutions  
Students can complete one/two semester at IITs/NITs/IIITs/GFTIs/Overseas Institutions only after 5<sup>th</sup> semester. The credits acquired by the student in such institute shall be transferrable to the parent institute. There should be some MoU between NIT Jamshedpur and such institute to implement this scheme.

## **12 Minor Degree**

Minor is an additional credential; a student should earn 16-20 credits [4-6 theory courses + one Project of maximum 2 credits] worth of additional courses in a discipline other than her/his major discipline of B.Tech degree. All the degree awarding academic Departments in the Institute offer minors in their disciplines, and will prescribe a specific set of courses and/or projects necessary for earning a minor in that discipline. The guidelines for minor degree as follow:

- 12.1 Maximum of top 15% students' strength in each UG programme and who have secured a minimum of 7.0 CGPA without any "F" Grade/backlog are only allowed to register for Minor program offered by any other Department.
- 12.2 Courses for Minor specialization start from 3<sup>rd</sup> Semester and the student is required to register for at least one minor specialization course in every semester.
- 12.3 Students registering for Minor program shall be prepared to write more than one exam in a day.
- 12.4 A major degree along with minor degree will be awarded to a student, if he/she earns all the 16-20 credits along with required 160-170 credits of B.Tech within the specified duration.
- 12.5 After registering for the Minor program, if a student is unable to earn all the 16-20 credits in a specified duration, he/she shall not be awarded Minor degree. However, if the student earns all the required 160-170 credits of B.Tech, he/she will be awarded only B.Tech degree in the concerned branch.
- 12.6 Minimum and maximum number of students for any Minor specialization is 10 and 60 respectively.
- 12.7 The student shall be given a choice of withdrawing all the courses registered and/or the credits earned for Minor program at any time; and in that case, the student will be awarded only B. Tech degree in the concerned branch on earning the required credits of 160-170.

- 12.8 There is no transfer of credits from Minor program courses to regular B. Tech degree course and vice versa.
- 12.9 After successful completion of the Minor specialization requirements, the student will be awarded a degree in “name of the discipline” with minor specialization in “name of the minor specialization”. For e.g. B.Tech in Civil Engineering (CE) with minor in Artificial Intelligence/Machine Learning.

### **13 Honors Degree**

Honors is an additional credential a student may earn if she/he opts for the extra 16-20 credits needed for this in her/his own discipline. The concerned department specifies the set of courses for earning Honors. Honors is not indicative of class.

1. Students with a minimum of 7.5 CGPA without any “F” Grade / backlog are only allowed to register for Honors program offered by that Department.
2. The student can choose only one minor program along with his/her basic engineering degree (Major). A student who chooses an Honors program is not eligible to choose a minor program and vice-versa.
3. Number of credits for Honors program is 16-20 with minimum 6 courses or (5 courses + 1 project for 2 credits) as prescribed by that Department.
4. Courses for Honors Program start from 3<sup>rd</sup> Semester and the student is required to plan registration for Honors courses, in order to complete all the six courses by the end of eighth semester.
5. Students registering for Honors program shall be prepared to write more than one exam in a day.
6. After successful completion of the Honors program, the student will be awarded a degree in “*name of the discipline*” with “Honors”

### **14 Attendance**

Following are the rules relating to attendance requirements:

- 14.1 Every student is expected to have 100% attendance in each course (lectures, tutorials, laboratories, workshops, EAA including its related camps and other publicized activities etc.) in which he/she has registered at the beginning of the semester. However, condonation for shortage of attendance up to 25% (i.e., not lower than 75% aggregate attendance in any course) may be granted by the Head of the concerned Department.
- 14.2 In any case the minimum attendance in order to make student eligible to appear in end-semester examination should not fall below 75%.
- 14.3 In certain cases, due to compelling reason like serious illness of his/her, or natural calamity or death case in the family or family calamity, any unforeseen reason, attendance may be relaxed up to 65% with permission of the Director upon the due recommendations from the head of the department processed through the Dean-Academic. However, giving permission for such cases should be on case-to-case basis, thoroughly reviewed by a committee constituted for it. The committee will be constituted by the Dean-Academic with the approval from the Director.

Committee composition:

- Dean Academics – Chairman

- Dean Student Welfare
- Concerned HoD
- Medical Officer of the Institute health Centre
- Subject Teacher
- Associate Dean (Academic) - Convener

After approval from the Director, all such cases are to be reported to the senate.

- 14.4 For the purpose of attendance calculation, every scheduled practical class will count as one unit irrespective of the number of contact hours.
- 14.5 Students not having the mandatory requirement of minimum 75% attendance in any course, shall not be permitted to appear for the end-semester examination in that course, and is awarded “F” Grade in that course. Such student has to register for the course in which he/she has shortage of attendance, as and when the course is offered next.
- 14.6 If the period of absence is for a short duration (of not more than one week), leave application should be submitted to the concerned Head of the Department, stating fully the reasons for the leave requested, along with the supporting document(s). The Head of the Department shall grant such leave. During such a leave period, the student will be marked as absent. Even with this leave applied, the student must satisfy at least 75% attendance requirement to appear for the end-semester examination.
- 14.7 If the period of absence exceeds one week, a prior application for grant of leave should be submitted through the Head of the Department to the Dean-Academic with supporting documents. The decision to grant such leave shall be taken by the Dean- Academic, after considering the recommendation of the Head of the Department, if the aggregate attendance is at least 75%. Even with this leave applied, the student must satisfy at least 75% attendance requirement to appear for the end-semester examination.
- 14.8 If a student is absent from the institute continuously for more than four weeks without notifying to the Dean Academic, his/her registration for that semester will stand cancelled.
- 14.9 A student representing the Institute in approved extracurricular activities such as Sports, Games, Cultural meets Seminars, Workshops, Conferences and Interviews arranged through, NCC/ NSS Camps or Training & Placement activities shall be considered as on-duty, subject to a maximum of five working days in a semester. Prior permission from the concerned Head of the Department/Dean (SW)/ PI (TAP) is required for availing on-duty permission. The period of absence, in such cases, will be counted as ‘present’ for the computation of percentage of attendance at the end of semester.
- 14.10 It will be the responsibility of the student to get his absence from classes condoned by the appropriate authority.
- 14.11 A student must intimate his/her absence to the Warden of the hostel in which he/she is residing before availing himself/herself of any leave. Failing to do so will be construed as breach of discipline and will be dealt with as per provisions.

## **15 Grading System**

- 15.1 The course and grade along with units are shown against each semester in which the student is registered.
- 15.2 As a measure of students’ performance, a 10-scale grading system using the following letter grades and corresponding grade points per credit shall be followed:

Letter Grade	Qualitative Meaning	Grade Point
O	Outstanding	10( $\geq$ 90)
A	Very Good	9 (80-89)
B	Good	8 (70-79)
C	Above Average	7 (60-69)
D	Fair/Average	6 (50-59)
E	Below Average	5 (41-49)
P	Pass/Poor	4 (40*)
F	Fail	0 (<40)
UM	Unfair means	0
I	Incomplete	0
X	Debarred	0
R	Insufficient attendance	0
W	Temporary withdrawal	0
ABS	Absent	0

- Scoring 40% (i.e. 20 marks out of 50 marks) or more in the end exam is mandatory for awarding “O to E” Grades.
- \* Students securing less than 40% marks in end-semester examination may be awarded “P” grade, even if they secure total marks greater than 40. Writing end-semester exam is mandatory.

In addition, there shall be four transitional grading symbols which can be used by the examiners to indicate the special position of a student in a subject:

- I — for ‘Incomplete assessment’, when the student misses the end-semester examination on medical grounds.
- X — for 'Debarred' on grounds of indiscipline/ malpractices in examinations.
- R — for 'insufficient attendance' in the course.
- W — for "Temporary withdrawal' from the Institute

*For I Grade:* If a student cannot attend the end-semester examinations due to valid reasons such as serious personal illness requiring hospitalisation or a family calamity, they may submit an appeal to the Dean of Academics through their Department Head and the Institute Medical Officer before the start of the examination. Upon review of relevant documents and being satisfied with the case's merit, a committee comprising the following members may recommend allowing the student to take subsequent examinations when they are held next while acknowledging and excusing their absence. In such instances, a temporary grade of 'I' is assigned to the student for the subject in question. The temporary ‘I’ grade will be replaced by the actual grade obtained by the student without lowering the grade.

Committee composition:

- Dean Academics – Chairman
- Dean Student Welfare
- Concerned HoD
- Medical Officer of the Institute health Centre
- Subject Teacher
- Associate Dean - Convener

15.3 If a student indulges himself/herself in any unfair means (UFM) or malpractice during examination hours. He/she must be punished and or penalised as per the approval of the committee. The committee composition is as follows.

- Faculty-in-Charge of Examination - Chairman
- Head of the Department to which the reported student belongs -Member
- The invigilator reporting the case -Member
- The Invigilator-in-Charge of the Examination Hall concerned -Member
- The Paper-setter concerned -Member
- Two members of faculty nominated by the IUGC -Members
- Associate Dean (Academic) -Convener

Following are the possible cases may be treated as UFM or malpractice.

S.No.	Nature of the Malpractice	Punishment(s)
1	Taking or tearing out the pages of answer sheets of used or unused answer booklets outside the examination room.	His/her subject registration will be cancelled. Or Refer to enquiry committee
2	Verbal or oral communication with neighbouring students after one warning.	Take the answer sheet and asking the student to leave the hall. Or Refer to enquiry committee
3	Possession of any incriminating material inside the examination hall (whether used or not) For Example: written or printed materials, bits, writings on scale, calculator, hand kerchief, dress, part of the body and hall ticket etc.	1. In case of Mid-semester Zero marks must be awarded 2. In case of END TERM Examination, his/her subject registration will be cancelled. He/She may be allowed for appearing supplementary examinations. Or Refer to enquiry committee
4	Possession of cell phones, programmable calculator, recording apparatus or any unauthorized electronic equipment. Copying from neighbour.	1. In case of Mid-semester Zero marks must be awarded. 2. In case of END TERM Examination, his/her subject registration will be cancelled. He/She may be allowed for appearing supplementary examinations. Or Refer to enquiry committee
5	Exchange of question paper, Answer sheet and other materials with another students.	1. In case of Mid-semester Zero marks must be awarded. 2. In case of END TERM Examination, his/her subject registration will be cancelled. He/She may be allowed for appearing supplementary examinations. Or Refer to enquiry committee
6	Mis-behaviour in the examination hall (unruly conduct, threatening the invigilator or physical assault to the invigilator, or any other examination officials).	Refer to enquiry committee
7	If any of the above activity is repeated in the same semester then	Refer to enquiry committee

If any other type of malpractices reported; the enquiry committee may recommend appropriate punishment.

15.4 A Semester Grade Point Average (SGPA) will be computed for each semester. The SGPA will be calculated as follows:

$$SGPA = \frac{\text{Credits of Courses} \times \text{Grade Point}}{\text{Sum of Credits}}$$

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

Where 'n' is the number of subjects registered for the semester, 'C<sub>i</sub>' is the number of Credits allotted to a particular subject, i and 'g<sub>i</sub>' is the grade-points carried by the letter grade awarded to the student for that subject. SGPA will be rounded off to the second place of decimal and recorded as such. The SGPA would indicate the performance of the student in the semester to which it refers.

- 15.5 Starting from the second semester and at the end of each semester S, a Cumulative Grade Point Average (CGPA) will be computed for every student as follows:

$$CGPA = \frac{\text{Credit} \times \text{Grade Point (All Semesters)}}{\text{Sum of Credits (All Semesters)}}$$

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

Where 'm' is total number of subjects the student has registered from the first semester onwards up to and including the semester S, 'c<sub>i</sub>' is the number of Credits allotted to a particular subject, s<sub>i</sub> and g<sub>i</sub> are the grade points carried by the letter corresponding to the grade awarded to the student for the subject. CGPA will be rounded off to the second place of decimal and recorded as such. The CGPA would indicate the cumulative performance of the student from the first semester up to the end of the semester to which it refers. The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to each student at the end of every semester.

- 15.6 For determining the inter semester merit ranking of a group of students only the rounded off values of the CGPAs will be used. The up-to-date overall performance is reported by the Cumulative Grade Point average (CGPA).
- 15.7 The Institute uses a multiplication factor of 10 (Ten) to convert CGPA to equivalent percentage marks. For example, CGPA 7.5 is equal to 75%.
- 15.8 When a student gets a grade 'I' for any subject(s) during the semester, the SGPA of that semester and the CGPA at the end of that semester will be tentatively calculated ignoring that (those) subject(s). After the 'I' grade(s) has (have) been converted to appropriate grades the SGPA and CGPA for that semester will finally be recalculated after taking into account this (these) grade(s). Until the 'I' grade has (have) been converted to appropriate grades the results of such students will be kept withhold.
- 15.9 When a student gets the grade 'F' in any subject during a semester, the SGPA and the CGPA from that semester onwards will be tentatively calculated, taking only 'zero point' for each such 'F' grade. After the 'F' grade(s) has/have been substituted by better grades during a subsequent semester, the SGPA and the CGPA of all the semesters, starting from the earliest semester in which the 'F' grade has been updated, will be recomputed to take this change of grade into account. Until the 'F' grade has (have) been substituted by better grades during a subsequent semester the results of such students will be kept withhold.

### 15.10 Guidelines for SWAYAM/NPTEL Courses

- A student may complete SWAYAM/NPTEL courses and transfer equivalent credits to partially complete the mandatory credit requirements of the concerned B.Tech. Program.
- Before the commencement of each semester, parent department shall release a list of SWAYAM/NPTEL courses approved as Departmental Elective/ Open Elective courses /core courses.
- A student shall only request for transfer of credits from such notified SWAYAM/NPTEL Courses as published by the concerned Departments.
- SWAYAM/NPTEL Courses are considered for transfer of credits only if the concerned student has successfully completed and obtained the SWAYAM/NPTEL Certificate to this effect.
- Students shall register for the approved Courses as per the schedule announced by SWAYAM/NPTEL.
- The credit equivalence for SWAYAM/NPTEL Courses as follows:

Number of Weeks	Equivalent Credits
12	3
8	2

- A student must submit the original SWAYAM/NPTEL Course Certificates to the Head of the Parent Department concerned, with a written request for the transfer of the equivalent credits. On verification of the SWAYAM/NPTEL Course Certificates and approval by the Head of the Department concerned, the SWAYAM/NPTEL Course(s) and equivalent Credits will be included in Course (with associated Credits) Registration of the concerned student in the Semester immediately following the completion of the SWAYAM/NPTEL Course(s).
- A student may submit a request for credit transfer from SWAYAM/NPTEL Courses before the last working day of the semester in which it is registered as specified in the Academic Calendar.
- The Institute shall not reimburse any fees/expenses incurred for the SWAYAM/NPTEL Courses.
- Students must give their all assignments and examinations through SWAYAM/NPTEL only for all SWAYAM/NPTEL registered courses.
- Students can take 2-4 courses having maximum of 5-6 credits starting from 6<sup>th</sup> semester onwards.
- The grading system for such SWAYAM/NPTEL Courses with transfer of credits is specified in Table given below:

Letter Grade	Qualitative Meaning	Final Score on the SWAYAM-NPTEL Certificate
O	Outstanding	90% and above
A	Very Good	From 80% to 89%
B	Good	From 70% to 79%
C	Above Average	From 60% to 69%
D	Fair/Average	From 50% to 59%
E	Below Average	From 41% to 49%
P	Pass/Poor	40%
F	Fail	<40 %

## Guidelines for Relative Grading

Relative grading scheme shall be followed in general for all the B.Tech Programs. However, if Class strength is less than 20, the concerned faculty shall follow absolute grading by announcing it in the beginning of the semester in the lecture schedule.

- Class average shall be calculated by considering all the students who have written the end-semester examination and it shall be within the range of “C” grade.
- “O” Grade shall be awarded to those students securing total marks  $>$  (average + 1.5 to 2 times standard deviation).
- “E” Grade shall be awarded to those students securing total marks  $\geq$  (average - 1 to 1.5 times standard deviation)
- “P” Grade shall be awarded to those students securing total marks  $\geq$  (average - ‘X’ times standard deviation) or 40 whichever is less. The value of ‘X’ shall be decided by DUGC with appropriate justification.
- Other grades are to be distributed, preferably maintaining the range for each grade between 0.5 to 1.0 times standard deviation. DUGC may review these ranges with appropriate justification.
- A student, who has not written end-semester examination, or getting total marks less than (average - ‘X’ times standard deviation) or 40 whichever is less, shall be awarded “F” grade. The value of ‘X’ shall be decided by DUGC with appropriate justification.
- I: for “Incomplete assessment”, when the student misses the End-semester examination on Medical grounds. R: for 'Insufficient attendance' in the course. W: for "Temporary withdrawal" from the Institute. • X: for "Debarred" on grounds of indiscipline/malpractices in examinations.

## 16 Performance Assessment

16.1 There will be continuous assessment of a student's performance throughout the semester and grades will be awarded by the subject teacher/co-ordination committee formed for this purpose. The Co-ordination Committee would be constituted for each subject taught by more than one teacher of one or more Department/Centres. Each committee would consist of all the teachers who are involved with the teaching of the subject during the semester. One of its members would be nominated by the Head of that Department, under whose name the subject is being offered, to act as its chairman. The co-ordination committee shall:

- lay down the course plan for the subject.
- co-ordinate instructions and progress of teaching in the subject and
- ensure that the full syllabus is covered.

- review periodically the performance of students who have registered in the subject.
- forward the results of the examinations and the final grades obtained by each student taking the subject to the concerned Head of the Department.
- moderate the question papers on the subject and ensure that the syllabus is well covered by the question papers.

## 16.2

- a) For arriving at a grade obtained by a student for a particular subject, initially numeric marks obtained by the student out of 100 (hundred) are to be determined. For subjects where the laboratory component (*p-component*) is non-zero, separate marks, each out of 100 (hundred), in the theory component (*L- & T- components*) and the laboratory component are to be ascertained first. Composite marks of the subject out of 100 are then to be computed by taking appropriate contribution of theory component and the laboratory component.
- b) The weightage for evaluation shall be based on credit ratio of the theory to laboratory in that course. For example, in a 2-0-2 (3 credit course), the weightage for the laboratory shall be 33% (1/3). For a 3-0-2 or 2-1-2 (4 credit course), the weightage for the laboratory shall be 25% (1/4).

- c) Distribution of 100 marks (Theory)

Mid-Semester Examination	30 Marks for 02 hours duration (Covering half of the syllabus)
End-Semester Examination	50 Marks for 03 hours duration (Covering full syllabus)
Teacher's Assessment	20 Marks
Total	100 Marks

- d) Distribution of 100 marks (Practical)

Lab Record and performance	- 80%
Test/ viva-voce	- 20%

- e) For assigning marks in the laboratory component (*p-component*), the relevant subcomponents that are to be considered are: day-to-day work, regularity reports, viva-voce etc. Percentage weightage of the different subcomponents in deciding the final marks is to be announced at the beginning of the semester.

16.3 The six to eight-week industrial training/internship undergone by the students in the summer vacation after the 6<sup>th</sup> semester would be assessed within Five weeks after the commencement of the seventh semester. The students are required to submit a written report on the training received and give a seminar, on the basis of which a grade would be awarded. The students are also required to submit to HoD a completion certificate in the prescribed format by the Competent authority of the organization where the training was received, without which he/she would not be assessed. Training and Placement Cell (TAP) cell will coordinate the internship process.

16.4 Assessment of major project work during 8<sup>th</sup> semester internship:

- a. Performance of the various activities involved in the project would be assessed individually at the end of each semester in which it is being carried out as per the curriculum. The students are required to submit a written report at the end of the semester. The HoD would appoint a project evaluation board for the purpose of assessment.

- b. The different components of evaluation and the weights assigned to these components are depicted below:

Supervisor's assessment	- 40%
Project Report/Thesis (to be assessed by the board)	- 20%
Evaluation Board's assessment [external examiner]	- 40%

The student is required to give a seminar on the project work done. The project evaluation board would conduct the viva-voce. Dates for conducting the seminar and the viva-voce, would be as per the academic calendar.

- c. If a student, due to non-completion of the project work, cannot submit the final project report at the end of 8<sup>th</sup> semester for B.Tech and does not appear before the evaluation board for the viva-voce or the evaluation board does not found the satisfactory performance on the date fixed by the department in conformity with the academic calendar, he/she may be granted extension of time not exceeding two months on the following conditions:

- Upon the request of student, the concerned supervisor can initiate the process of time extension approval from Dean Academic through the concerned HoD.
- He/she would be awarded one grade lower than the grade obtained by him/her.

- 16.5 The Head of the Department would constitute the Evaluation Board for conducting the comprehensive viva-voce examination as per the requirement of the curriculum. The board would decide the relative weight of the different aspects of the viva-voce and decide the grade to be awarded to the students. The dates of the viva-voce would be as per the academic calendar.

## 17 Examinations

- 17.1 The Academic Section of the Institute will centrally conduct the Mid-Semester, End-Semester Examinations and Supplementary examinations in respect of the theory component of the subjects. The laboratory examinations will be conducted by the departments as per the academic calendar.

- 17.2 A student will be issued an Admit Card/Course Registration Form for appearing in an examination, only if he/she has:

- a) Attendance record to the satisfaction of the teachers in the theory and laboratory classes and has completed the assignment works given.
- b) Paid all Institute and hostel dues of the semester.
- c) Not been debarred from appearing in the examination as a result of disciplinary proceedings.

- 17.3 A student may be debarred from appearing at the Mid-Semester or End-Semester Examination, if

- a) His/her attendance at lecture/tutorial/laboratory classes has not been satisfactory during the period, and/or,
- b) Any disciplinary action against him/her
- c) He/she involved in malpractice at an examination-

- 17.4 Class tests/assignments/tutorials/viva-voce/seminars, laboratory assignments, etc., are the constituent components of the continuous evaluation process, and a student must fulfil all

these requirements as prescribed by the teacher/co-ordination committee of the subject. If due to any compelling reason (such as his/her illness, calamity in the family, etc.) a student fails to meet any of the requirements within/on the scheduled date and time, the teacher/co-ordination committee in consultation with the concerned Head of the Department may take such steps (including conduction of compensatory tests/examinations) as are deemed fit.

17.5 Appearing in the end-semester examination in the theory component of a subject is compulsory for a student. If a student fails to appear in the end-semester examination without any compelling reason and without prior information to HoD, he/she will be assigned an 'F' grade in the subject. The student has to register the same subject as a backlog subject. Further, such students will not be permitted to appear at the supplementary examination.

However, if a student misses the end-semester examination due to a compelling reason like serious illness of himself/herself or a calamity in the family, he/she may appeal to the Dean Academic through his/her HoD for permission to appear at the supplementary examination(s), as the case may be. A sub-committee of the IUGC consisting of the following members may, after examining the documents and being convinced about the merit of the case, recommend/permit him/her to appear in the supplementary examination(s) with full credit condoning his/her absence:

- The Dean Academic– Chairman
- The Dean, Students' Welfare
- Concerned HoD
- The Institute Doctor or a Doctor recognized for the purpose by the Institute
- Associate Dean (Academic) - Convener

17.6 Students will be permitted to appear in the examination in only those subjects for which they have registered at the beginning of the semester and have not been debarred.

17.7 The final grades awarded to the students in a subject must be submitted by the teacher/co-ordination committee within Seven (7) days from the date of holding the examination to the concerned HoD for processing.

17.8 The evaluation of performance in the Extra Academic Activities (EAA) will be done by the authorities conducting them. The grades will be communicated to the Dean (Academic) by the following authorities through the co-ordinator of EAA: NSS/NSO: Head NSS/Dean (Students Welfare)/NCC.

17.9 Any change of grade of a student in a subject, consequent upon detection of any genuine error of omission and/or commission on part of the concerned teacher, must be forwarded by the teacher, co-ordination committee and approved by the Departmental Academic Committee of the concerned Department within 7 (seven) days from the date of result declaration.

17.10 For the benefit of and as a process of learning by the students, the scripts after correction of all class tests, mid-semester examinations, assignments etc. would be shown to the students. The scripts of the end-semester examinations are to be shown within Seven (7) days from the date of examination.

17.11 With a view to assist the students, who failed in one or more subjects in the autumn and/or spring semester in a year, consultation classes may be conducted immediately after the end-semester for making up their deficiency and improving the performance.

17.12 A student in any degree programme (UG) must complete the prescribed course work within a further period of Six (6) years. In special cases, the Senate may, on the recommendation of the Department and the Under Graduate Program Evaluation Committee (*DUGC*), further extend the total time limit for completion of all the requirements up to (Seven) 7 years for the B. Tech degree.

17.13 The backlog students have to give the Mid-Semester and End-Semester examinations.

17.14 Make-up Mid-semester Examination:

Suppose a student fails to appear for the mid-semester examination in any subject(s), under very special circumstances only, due to compelling reasons like a serious illness /representing institute activity outside. In that case, the student shall apply to the Dean (Academic) along with relevant certificates/ documents duly recommended by the respective Head of the departments. All cases will be referred to concerned committees constituted for medical/institute representations for scrutiny and recommendations. On the committee's recommendation, the approved list of candidates shall be permitted for a make-up mid-sem examination. The make-up mid-sem examination of such candidates will cover the course content up to one class day before the date of such re-exam and will be conducted centrally by Dean Academic office. However, the mid-semester examination should not be conducted within two weeks before the start date of end-semester examinations.

17.15 Guidelines for Mid-Term Examination Question Paper

- a. Mid-term Examination will be conducted only when atleast 10 classes to be completed for 02 credit course, 15 classes for 03 credit course and 20 classes for 04 credit courses.
- b. Mid-term examination will be a maximum of 30 marks.
- c. Each question must be mapped with the Course Outcomes (COs) as per NBA Guidelines.
- d. There should be common question paper for common courses running in multiple sections. HoD will appoint a course coordinator for such courses. Question paper should be prepared in consultation with other subject teachers.

17.16 Guidelines for End-Term Examination Question Paper

- a. End term Examination will be conducted only when atleast 20 classes to be completed for 02 credit course, 30 classes for 03 credit course and 40 classes for 04 credit courses.
- b. End term examination will be a maximum of 50 marks.
- c. Each question must be mapped with the Course Outcomes (COs) as per NBA Guidelines.
- d. There should be common question paper for common courses running in multiple sections/. HoD will appoint a course coordinator for such courses. Question paper should be prepared in consultation with other subject teachers.

Question Paper Template and Blooms' Taxonomy is given below.

Name of the Student:

Registration No.:

**NATIONAL INSTITUTE OF TECHNOLOGY JAMSHEDPUR**

Department of .....

**Mid/End Semester Examination, December, 2024**

Program: B.Tech/M.Tech/M.Sc./MCA/Ph.D.

Semester:

Branch name:

Course Code:

Course Name:

Course Instructor:

Time:

Max. Marks:

**Course Outcomes (CO)**

CO1: Students will solve differential equations and describe the system by an ordinary differential equation

CO2: Students will solve the expression of a given function by Fourier series and Fourier Transform of the function

CO3: Students will exercise Partial differential equation for an unknown function with many independent variables

CO4: Students will evaluate multiple integrals and convert line integrals to area integrals and surface integrals to volume integrals

Instructions:

Attempt all the questions. Assume suitable data, if needed.

Q. No.	Question Description	Marks	CO
1			CO1
2			CO2
-			CO3
-			CO4
-			CO5
-			
-			
-			
9			
10			

**Note:**

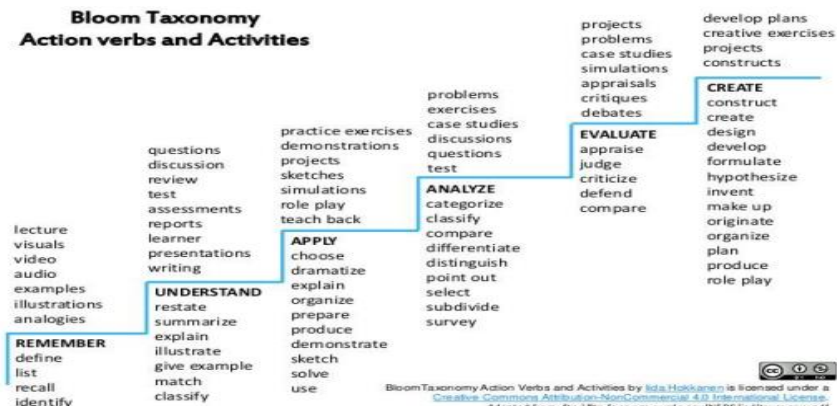
1. This is the sample Question Paper Form, paper setter can vary the number of questions.
2. Paper setter should ensure coverage of all course outcomes.
3. For Bloom Taxonomy Level, paper setter can use Table-I
4. Change the CO statement as per course details

Name of the Student:

Registration No.:

**Table - I**

**Bloom Taxonomy  
Action verbs and Activities**



### 17.17 Rules Regarding Supplementary Examination

- a. Supplementary examination will be conducted after each semester as specified in the Academic Calendar.
- b. A student will not be allowed to appear in more than Four (4) subjects in the supplementary examination.
- c. Intending students must submit their application, countersigned by the teacher(s) of the subject(s) or the Head of the Department concerned, along with the necessary fees to the Academic section by the date as announced by a notification.
- d. The supplementary examinations shall be held on such dates as laid down in the Academic Calendar.
- e. The grade in a subject scored by the student appearing in the supplementary examination will be recomputed by substituting the marks of the end-semester in the total marks scored by those scored in the supplementary examination. Unless exempted as per regulations in clause 15.2 a student is entitled to only one grade lower than the actual grade thus scored, except that performance grade 'P' remains unaltered, as elucidated in the table below:

Grade obtained	Grade to be awarded
F	F
P	P
E	P
D	E
C	D
B	C
A	B
O	A

- f. There is no provision for supplementary examination in the laboratory component. If a student cannot clear the laboratory component of a particular subject, he/she will be assigned the grade 'F' in that subject and has to reregister in the subject, if permitted, in the immediately following semester in which it is offered.

## 18 Residence

The Institute is essentially a residential one and unless otherwise exempted/permitted every student shall be required to reside in and be a boarder of a hostel to which he/she is assigned. The terms and conditions that a student must abide by during his/her stay in a hostel are mentioned below.

- 18.1 The mess of each hostel shall function as a single integrated unit and shall not, under any circumstances be sub-divided into any kind of groups or sub-groups.
- 18.2 Under special circumstances, such as medical reason, parents residing within 5km of radius from the institute, the Director/Dean Students Welfare (SW) with consultation from respective wardens may permit a student to reside with his Parent/Guardian in the Institute Campus or within a reasonable distance from the Institute not beyond of 5 km radius. Such a student shall, however, be attached to a hostel and will be required to pay seat rent and Hostel establishment charges fixed by the Hostel Management Committee (HMC) and the Warden of the hostel. However, this permission may be withdrawn at the discretion of the Institute, at any time considered appropriate without assigning any reason.
- 18.3 No married accommodation shall be provided to any undergraduate student.

- 18.4 No student shall occupy the residence of other student(s) or give up his/her assigned accommodation in any hostel without prior permission of the Chief-warden.
- 18.5 A student shall reside in a room allotted to him/her and may shift to any other room only under the direction/permission of the Warden.
- 18.6 Students shall be required to make their rooms available whenever required for inspection, repairs, maintenance or disinfecting and shall vacate the rooms when leaving for vacations/holidays.
- 18.7 Students shall be responsible for the proper care of furniture, fan and other fittings/fixtures in the room allotted to them and shall generally assist the Warden in ensuring their proper use. If a student found guilty for the damage of hostel property, chief warden with consultation of respective warden may impose fine and or expel student from the hostel, and hostel fee, mess fee for that semester will be forfeited.
- 18.8 Students shall be responsible for the safe keeping of their own property. In the event of loss of any personal property of a student due to theft, fire or any other cause, the Institute shall accept no responsibility and shall not be liable for payment of any compensation.
- 18.9 Engaging personal attendants, keeping pets and use of appliances like electric heater, refrigerators etc. by a student in the hostel are strictly prohibited.
- 18.10 Besides the above, students must abide by detailed rules and regulations framed by HMC from time to time and available in the respective Hostels.
- 18.11 The Institute reserves the right to modify any or all the above rules from time to time.

## **19 Industrial Training and Field Work**

- 19.1 The curricula for all B.Tech/B.Tech. (Hons) shall include six months Internship and two ONLINE Courses through SWAYAM/NPTEL to be carried out during 8<sup>th</sup> Semester after successful completion of their seventh semester.
- 19.2 Only those students shall be allowed, who are permitted by the T&P Cell of the Institute to go for the paid internship likely to be converted to Performance based Placement Offer (PPO) or it should be limited of the reputed organizations.
- 19.3 Students shall take classes as per the syllabus through SWAYAM/NPTEL and appear for MID and End-semester Examination for their evaluation.
- 19.4 The work carried out during internship shall be treated as Project work. The students will be required to submit the project report and will have to report the Institute for examination/presentation as and when required. They will appear in examination at NIT Jamshedpur.

## **20 Degree Requirements**

- 20.1 Credit requirements: Minimum earned credit requirements for the award of degree are 160 with a CGPA of not less than 5.0 and SGPA of not less than 4.5 in each semester. In any case, if CGPA is less than 5.0, he/she will not get the degree.
- 20.2 The minimum duration for a student for complying with the degree requirement is Four (4) academic years from the date of first registration for his/her first semester.
- 20.3 The maximum duration for a student for complying with the degree requirement is Six (6) academic years from the date of first registration for his/her first semester.
- 20.4 Award of Degree:

A student who satisfies graduation requirement and hence qualifies for the B.Tech, is awarded the division as per the following norms:

$6.00 \leq \text{CGPA}$	1 <sup>st</sup> Division
$5.00 \leq \text{CGPA} < 6.00$	2 <sup>nd</sup> Division

- 20.5 In order to qualify for a B.Tech/B.Tech(Hons)/B.Tech with Minor Degree of the Institute, a student must:
- Complete all the credit requirements for the degree as laid down in the prescribed curriculum of the discipline, with a minimum grade 'P' scored in every subject.
  - 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.
  - Obtain a SGPA of 4.50 or higher at the end of the semester in which he/she completes all the requirements for the degree.
  - Have cleared all the dues to the Institute, the hostel, the Library and the Department, etc.
- 20.6 The minimum total credit requirements that have to be satisfactorily completed for the award of a degree will be decided by the senate whenever a new curriculum is framed.
- 20.7 Normally, a student should complete all the requirements consecutively in Eight (8) semesters for B.Tech/ B.Tech (Hons.)/B.Tech with Minor degree. Academically weaker students may be granted time up to Twelve (12) semesters to complete all the requirements for degree. Any further extension would have to have the approval of Senate.
- 20.8 Semester Leave: A student shall not be allowed to withdraw from the Academic Programme temporarily and shall complete his/her studies without any break. However, for bona fide reasons/compelling reasons like medical illness/ family calamity and/or in exceptional circumstances, a student may be allowed to withdraw temporarily for a Semester with prior approval of Chairman, Senate on the recommendations of the DUGC and IUGC. Such Semester leave of Absence(s) shall not exceed two semesters with or without break during the entire period of the Academic Programme including Semester Leave. In no case shall the total duration of the Programme exceed the maximum permissible duration of Seven (7) years. The students shall submit application for the semester leave to the Dean Academic through proper channel. After availing the semester leave, the student has to re-register the same semester in which he/she left for continuation of study.

## 21 Withdrawal from the Institute

- 21.1 A student who has been admitted to a degree course of the Institute may be permitted, with the approval of competent authority, to withdraw temporarily for a period of one semester or more from the Institute on grounds of prolonged illness or acute problem in the family which compelled him to stay at home, provided:
- a. He/ She applies to the Institute within 15 days of the commencement of the semester or from the date he or she last attended his/her classes whichever is later, stating fully the reason for such withdrawal together with supporting documents and endorsement of the father/guardian.

- b. The Institute is 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 clause 20.3.
  - c. There are no outstanding dues or demands from him/her by the Institute/Hostel/Department/Library/Gymkhana/NSS.
- 21.2 A student who has been granted temporary withdrawal from the institute will be required to pay the tuition fee and other essential fees/charges for the intervening period till such time as his/her name is borne on the Roll List.
- 21.3 A student will be granted only One such temporary withdrawal during his/her tenure as a student of the Institute.
- 21.4 A student who has been granted temporary withdrawal from the institute as per provisions will be required to pay the tuition fee and other essential fees/charges for the intervening period till such time as his/her name is borne on the Roll List.
- 21.5 A student will be granted only One such temporary withdrawal during his/her tenure as a student of the Institute.
- 21.6 A student who has completed/attended the First and the Second semesters of studies in this Institute may, on grounds of health, apply for transfer to any other *NIT*. If the Director approves such an application, it may be forwarded by the Dean of Academic Affairs to the other *NIT* concerned for their consideration. The decision of the competent authority of the other *NIT* in the matter shall be final.

## **22 Termination from Programme**

- 22.1 Termination of Programme – The Under Graduate Programme of a student may be terminated by the Senate if he/she is Academically Deficient and has not been able to remove his/her Academically Deficient for any year of B. Tech. Programme in maximum of three Academic years and within total permissible duration of Six (6) for the B. Tech Programme.
- 22.2 Appeal Against Termination – A student whose programme is terminated on account of inadequate Academic Performance or otherwise has the right to appeal to the Chairman, Senate through DUGC and IUGC for reconsideration. While making the appeal against termination, he/she shall give reasons for his/her poor academic performance and/or explain why his/her position (case) merits reconsideration, in prescribed format. The Senate shall take a final decision after considering all the available inputs. However, the senate shall not entertain any further appeal for review unless substantial additional information is brought to its notice. The senate shall not entertain the appeal more than twice from the same student.

## **23 Institute Medals and Prizes**

- 23.1 Award of Gold medal will be given to the topper of each UG programme and Silver medal to the topper of each course. Award of Gold medal will be given to first ranker of Under Graduate Programme. Total number of Gold medal will be one only for the UG programme.
- 23.2 The institute will award Silver medal to the class topper of each discipline of Under Graduate programme. However, the senate shall have the authority to award Institute medals and prizes as it deems fit from time to time.

23.3 The institute will publish the rank list for top 10 students or 10% of total student's strength whichever is less in each branch of UG Programme with joint signatures of Associate Dean (Acad) and Dean (Acad).

## **24 Merit-cum-Means (MCM) Scholarships**

The Institute awards scholarships on the basis of merit-cum-means to all eligible students of the 4-year B.Tech/B.Tech. (Hons) in accordance with the following rules:

- 24.1 All students admitted to any of the 4-year B.Tech/ B.Tech.(Hons)/B.Tech with Minor, except the students belonging to SC and ST (who are eligible for Post-Metric Scholarship of their respective State Governments) who fulfil the conditions hereinafter appearing shall be eligible for the award of the MCM scholarship.
- 24.2 These scholarships will be awarded to not more than **25%** of the students admitted each year to the Undergraduate courses.
- 24.3 The value of these scholarships shall be as determined by the Board of Governors from time to time.
- 24.4 All MCM scholarship holders will be entitled to exemption from payment of institute tuition fee. They shall, however, be required to pay all other prescribed fees.
- (a) The MCM scholarships will be payable for all 12 months of the academic session, from the month of July of a year to the June of the following year.
- (b) Scholarships for the month of July shall be paid in full regardless of the date in **July** when the Institute reopens after the Summer Vacation, provided the student joins the Institute on the prescribed date of registration. Otherwise, the scholarship for the month of July shall be paid on a pro-rata basis.
- 24.5 No student will be permitted to enjoy more than one scholarship during the same period. In the event of an awardee's becoming eligible for another scholarship from any other source, he/she will have the option to accept either of the two. In such a case he/she is required to communicate in writing his/her choice to the Dean of Academic Affairs.
- 24.6 The initial award of the scholarship and its annual renewal through proper application shall be governed by the following conditions:
- (a) The student satisfies the merit criterion laid down for the award of these scholarships.
- (b) The parent/guardian of the student satisfies the means criterion laid down for the award of the scholarship.
- (c) No disciplinary action has been taken against him/her during the preceding year.
- 24.7 The merit criterion for the award of the scholarship shall be as follows:
- (a) For fresh entrants, the student should have obtained at least **75 %** marks in aggregate or a grade corresponding to **75 %** marks in the qualifying examination for JEE Mains.
- (b) For subsequent renewals, the student's performance in the two consecutive semesters of the preceding session, that is, the average of the two SGPA's concerned, as updated after the last supplementary/summer quarter examination, must not be lower than 8.00.

- 24.8 The upper limit of annual income as laid down by the GoI from time to time shall be applicable as the means criterion for the award of MCM scholarships. The income during the financial year completed before the session commences shall be taken into consideration for this purpose.
- 24.9 An employer's certificate/copy of the income tax return/income affidavit for the financial year preceding the grant or renewal of the award, as the case may be shall have to be submitted by the parent/guardian of the student along with the application for the scholarship.
- 24.10 In the event of a tie among two or more applicants for the award of the last available scholarship, every student involved in the tie will be awarded the scholarship even if the total number of scholarships exceeds the 25% limit.
- 24.11 The scholarship holder must (a) obey all the laid down procedures regarding attendance (b) appear in all the semester examinations except for illness or calamity in the family (to be supported by documents). In case of any breach the scholarship would be terminated.
- 24.12 Outstanding Institute and Hostel dues, if any, may be deducted at the source and the balance, if any, would be paid to the scholar.
- 24.13 Those students who satisfy the specified means criterion but are unable to satisfy the specified merit criterion may be granted exemption from the payment of tuition fees. The number of such tuition free students shall be restricted to **10%** of the students admitted each year.

## **25 Conduct and Discipline**

Following rules shall be in force to govern the conduct and discipline of all students -

- 25.1 Students shall show due respect to the teachers of the Institute, the Wardens of the Hostels /Halls of Residence, the Sports Officers of Gymkhana and the Officers of the National Social Service: proper courtesy and consideration should be extended to the employees of the Institute and of the Hostels/Halls of Residence. They shall also pay due attention and courtesy to visitors.
- 25.2 Students are required to develop a friendly relationship with fellow students. In particular, they are expected to show kindness and consideration to the new students admitted to the Institute every year. Law bans ragging in any form to anybody — acts of ragging will be considered as gross indiscipline and will be severely dealt with.
- 25.3 The following acts of omission and/or commission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures:
- a. Ragging
  - b. Furnishing false statement of any kind in the form of application for admission or for award of scholarship, fee waiver, etc.
  - c. Displaying lack of courtesy and decorum; resorting to indecent behaviour anywhere within or outside the campus.
  - d. Wilfully damaging or stealthily removing (theft of) any property/belongings of the Institute, Hostel or fellow students.
  - e. Possession, consumption or distribution of alcoholic drinks, tobacco products or any kind of hallucinogenic drugs.
  - f. Adoption of unfair means in the examinations.

- g. Organizing or participating in any group activity in company with others in or outside the campus without prior permission of the Dean of Student' Welfare.
- h. Mutilation or unauthorized possession of library books.
- i. Resorting to noisy and unseemly behaviour, disturbing studies of fellow students.
- j. Not intimating his/her absence to the warden of the hostel before availing any leave.

Commensurate with the gravity of the offence, the punishment may be reprimand, fine, and expulsion from the Hostel, debarment from an examination, rustication for a specified period or even outright expulsion from the Institute.

25.4 For an offence committed (a) in a Hostel, (b) in the Department or a classroom and (c) elsewhere, the Warden, the Head of Department and the Dean of Students' Welfare, respectively, shall have the authority to reprimand or impose fine or take any other suitable measure. All cases involving punishment other than reprimand shall be reported to the Chairman of the Standing Disciplinary Committee.

25.5 (a) All major acts of indiscipline, which may have serious repercussions on the general body of students, and/or which may warrant a uniform and more formalized nature of investigation, shall be handled by the Standing Institute Disciplinary Committee appointed by the Senate. The Standing Institute Disciplinary Committee consists of the following ex-officio and other members:

- Dean Students' Welfare-Chairman
- Chairman, Hostel Management Committee
- Warden of the Hostel of which the student concerned is a boarder
- One member of faculty nominated by the Chairman, Senate, by rotation for two years.
- President, Student Council
- One of the student representatives in the Senate, to be nominated by the Dean, Students' Welfare, for one year
- Associate Dean (Academic)-Convener

In addition, the Chairman may invite any other person(s) to be associated with the proceedings of a particular case, if his/their participation are considered necessary in disposing of the matter.

b) Recommendation of the committee, which will include the suggested punishment in cases of guilt proven, will be forwarded to the Chairman Senate for necessary action.

25.6 Cases of adoption of unfair means (UFM) in an examination shall be dealt with by the committee as mentioned in clause 15.3. The Committee shall recommend appropriate measures in each case to the Chairman of the Senate through Dean Academic for awarding the punishment.

## **26 Relaxation**

The Senate may, under exceptional circumstances, consider any case of a student having a minor deficiency in respect of any of the requirements stated in these Regulations and relax the relevant

provision 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.

## **27 Amendments**

The academic programs of the Institute are governed by Rules and Regulations approved by the Senate from time to time. The Senate is a statutory and supreme body that governs all academic matters of the Institute, and the rulings of Senate Chairperson (Director of the Institute) are final in regard to all academic issues.

Notwithstanding all that has been stated above, the Senate, has the right to modify any of the above rules and regulations from time to time. All such modifications shall be documented and numbered sequentially and will be made available in the Institute website.

\*\*\*\*\*