

राष्ट्रीय प्रौद्योगिकी संस्थान पटना

NATIONAL INSTITUTE OF TECHNOLOGY PATNA  
BIHAR, INDIA



श्रमोऽनवरत चेष्टाय

**CURRICULA - 2022**

for

**Bachelor of Technology,**

**Bachelor of Architecture and**

**Dual Degree Programme (B.Tech + M.Tech)**

(Effective from Academic Session 2021-2022 and onwards)

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## **VISION**

To contribute to India and the World through excellence in scientific and technical education and research; to serve as a valuable resource for industry and society; and to remain a source of pride for all Indians.



## **MISSION**

To generate new knowledge by engaging in cutting-edge research and to promote academic growth by offering state-of-the-art undergraduate, postgraduate and doctoral programmes.

To identify, based on an informed perception of Indian, regional and global needs, areas of specialization upon which the Institute can concentrate.

To undertake collaborative projects which offer opportunities for long-term interaction with academia and industry.

To develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

## **VALUES**

- ✚ *Academic integrity and accountability.*
- ✚ *Respect and tolerance for the views of every individual.*
- ✚ *Attention to issues of national relevance as well as of global concern.*
- ✚ *Breadth of understanding, including knowledge of the human sciences.*
- ✚ *Appreciation of intellectual excellence and creativity.*
- ✚ *An unfettered spirit of exploring, rationality and enterprise.*

## Regulations

### 1. Introduction

The provision contained in these Regulations will govern the conditions for imparting courses of instructions conducting examinations and evaluation of students' performance leading to the 4-years courses in Engineering/ Technology for the award of B. Tech degree, 5-years course in Architecture for the award of B. Arch degree and 5-year course for award of Dual Degree (B.Tech + M.Tech). This regulation is effective from the academic session 2021 – 2022 and onwards.

1.1 **Discipline:** The disciplines in which the course of studies for the B.Tech and B.Arch Degree are as detailed below:

1. Civil Engineering
2. Computer Science and Engineering
3. Electrical Engineering
4. Electronics and Communication Engineering
5. Mechanical Engineering
6. Architecture

#### Dual Degree Programme (B.Tech + M.Tech)

1. Computer Science and Engineering with Specialization in Data Science (5 Years, Bachelor and Master of Technology (Dual Degree))
2. Computer Science and Engineering with Specialization in Cyber Security (5 Years, Bachelor and Master of Technology (Dual Degree))
3. Electronics and Communication Engineering with Specialization in Microelectronics and VLSI System Design (5 Years, Bachelor and Master of Technology (Dual Degree))
4. Electrical Engineering with Specialization In Power System Engineering (5 Years, Bachelor and Master of Technology (Dual Degree))
5. Mechanical Engineering with Specialization in Manufacturing and Industrial Engineering (5 Years, Bachelor and Master of Technology (Dual Degree))
6. Civil Engineering with Specialization in Construction Technology and Management (5 Years, Bachelor and Master of Technology (Dual Degree))
7. Material Science and Engineering (5 Years, Bachelor and Master of Technology (Dual Degree))
8. Mathematics and Computing Technology (5 Years, Bachelor and Master of Technology (Dual Degree))

1.2 The provisions of this Regulation shall also be applicable to any new disciplines that are introduced from time to time and added to the list in section 1.1

1.3 The Board of Governors may, on the recommendation of the Senate, change any or all parts of this Regulation at any time considered appropriate by the Senate.

### 2. Academic Calendar

2.1 The academic session is divided into two semesters each of approximately 20 weeks duration: an Odd/ Autumn Semester (July - December) and an Even/ Spring Semester (January - June).

2.2 The schedule of academic activities for a session, inclusive of dates for registration, mid semester and end semester examinations, inter - semester breaks etc., approved by the Senate shall be laid down in the Academic Calendar for the session. The Academic Calendar shall strive to provide for a total of about approximately 100 working days in each semester.

### 3. Admission

3.1 Admission to all courses will be made in the Autumn Semester of each session, at the First Year

level, through the Central Seat Allocation Board (CSAB)/Joint Seat Allocation Authority (JoSAA) and based on All India Engineering Entrance Examination/ JEE (Mains) conducted by National Test Agency (NTA) or as approved by MoE (Shiksha Mantralaya), Govt. of India for admission to B. Tech, B. Arch and 5-year Dual Degree Programme (B.Tech + M.Tech).

- 3.2 Besides the successful candidates admitted as per section 3.1, specified number of foreign nationals and Indian nationals residing abroad in accordance with the policy laid down by the DASA/Government of India, may be admitted directly to the first year of *any* of the courses covered by this Regulation.
- 3.3. 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 career on grounds of unsatisfactory academic performance, irregular attendance in classes, unfair means in examination and/ or any act of indiscipline.

#### **4. Residence**

- 4.1 The Institute is partially residential. Hostel accommodation is provided to the students as per availability of seats in hostels.
- 4.2 The terms and conditions that a student must fulfill during his/her stay in a Hostel are as mentioned in *Appendix - I*.

#### **5. Attendance**

- 5.1 A minimum attendance of 75% in all classes (lectures + tutorials, laboratories, workshops etc.) is compulsory. A student may be debarred from appearing at an examination on ground of unsatisfactory attendance.
- 5.2 Absence from classes without prior permission will be considered as an act of Indiscipline. Such cases will be dealt with in accordance with clause 3.3.
- 5.3 Detailed rules regarding condonation/ relaxation of attendance up to Maximum of 15% in classes etc. are given in *Appendix - II*.

#### **6. Conduct and Discipline**

- 6.1 Students shall conduct themselves within and outside the premises of the Institute in a manner befitting the students of an institution of national importance.
- 6.2 Detailed rules regarding conduct and discipline are given in *Appendix - III*.

#### **7. Change of Branch**

- 7.1 The students admitted to a Course leading to the B. Tech. program in a particular branch will ordinarily be required to continue in that branch of studies.
- 7.2 However, the Institute may permit a few students subject to their fulfilling the prescribed conditions to change over from one branch to another, after two semesters of continuous studies. Detailed rules governing the change of branch are given in *Appendix - IV*.

#### **8. Course Structure**

The course duration of B. Tech degree will be 4 years, B.Tech + M.Tech Dual Degree will be 5 years and B. Arch degree will be 5 years (Appendix-V).

- 8.1 The curricula for the different degree programs as proposed by the respective departments and recommended by the Board of Studies (BoS) shall have to have the approval of the Senate. The departments would also prepare the syllabus of each subject containing the scope of studies and detailed instructions to be imparted which must have the approval of the BoS.

- 8.2 Addition of elective course: In case of addition of elective course required to be added in a particular semester, respective HoD may recommend such courses. Senate authorizes Director to approve the recommendation. Later on, this may be placed in the next BoS meeting of the department.
- 8.3 All Subjects may have a lecture - tutorial – practical component (L-T-P) to indicate the contact hours per week. Any of the component 'L', 'T' and 'P' of a subject may be void. All subjects would have a credit count 'Cr'. Teaching of subjects would be reckoned in terms of credits.
- 8.4 Every student in the first year is required to register in the Extra Academic Activity (EAA) eg Sports/Innovative projects/Swachha Bharat Mission/NSS.
- 8.5 **Industrial Training and Field work:** The curricula for all B. Tech. would include compulsory industrial training for 4 to 6 weeks carrying 2 (two) credits, to be carried out in the summer vacation at the end of the sixth semester.

## 9. **Minor Programme**

- 9.1 The 39th Senate meeting held on 06.05.2022 has approved the course structure and detailed syllabus of Minor courses of various departments. The Institute will be offering minor program from 3rd Semester onwards for the undergraduate (B.Tech) students who will have an option to select from a prescribed basket of courses of a minimum of 20 credits to a get a Minor from another department, provided they fulfill the following criteria:-
- CGPA at the end of the 2nd Semester should be 8 and above with NO backlog.
  - Minimum number of students to float a minor program is 05 and maximum 20 (to adhere strictly).
  - Allocation of students in different minor programs will be made centrally, based on the choices given by the eligible students on the basis of their CGPA.
  - Minor degree credit requirement is over and above the minimum credit requirements for Major B.Tech Degree.
  - The branch opted for minor degree by a student is one-time choice and cannot be altered under any circumstances.
  - In case of a tie in CGPA for allotting Minor degree, the SGPA of the second semester will be considered.

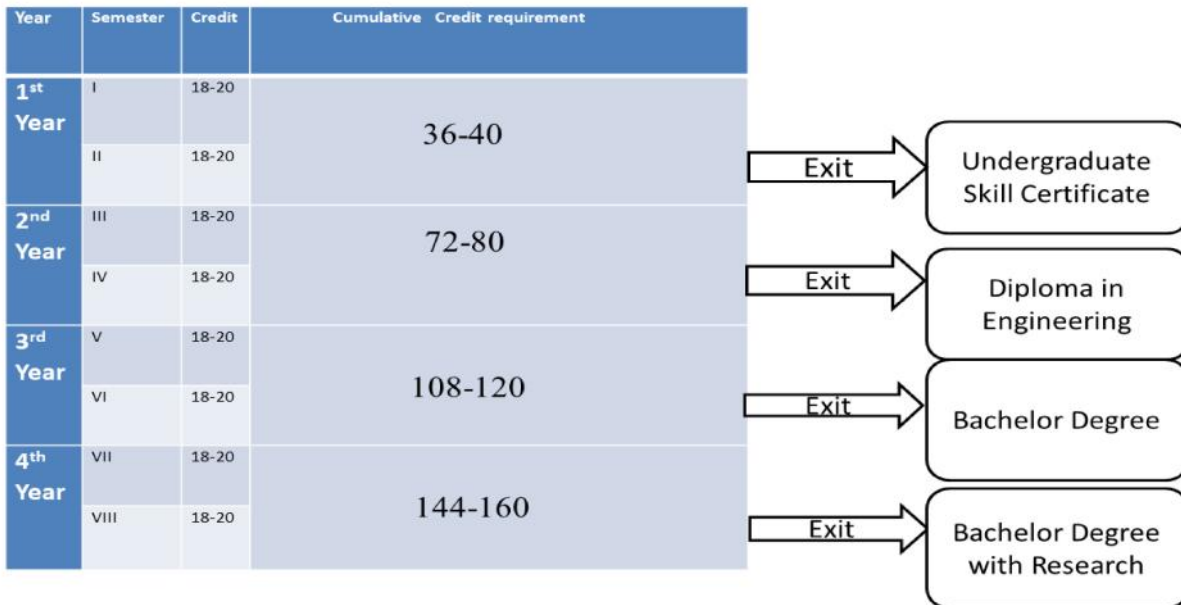
### 9.2 **MINOR DEGREE OFFERED BY VARIOUS DEPARTMENTNS AT NIT PATNA (Session 2022-23)**

Sl. No.	Department	Minor Degree Offered in	Eligible Departments
1	Mechanical Engineering	1. Robotics	CE, EE, ECE, CSE
		2. Manufacturing Systems	CE, EE, ECE, CSE
2	Electrical Engineering	1. Control System	ME, CE, CSE
		2. Power System	ME, CE, CSE, ECE
3	Civil Engineering	1. Infrastructure Engineering	ME, EE, CSE, ECE
4	Electronics & Communication Engineering	1. Microelectronics & VLSI Design	ME, EE, CE, CSE
		2. Communication Engineering	ME, CE, CSE
5	Computer Science and Engineering	1. Internet of Things	ME, EE, CE, ECE
		2. Artificial Intelligence	ME, EE, CE, ECE

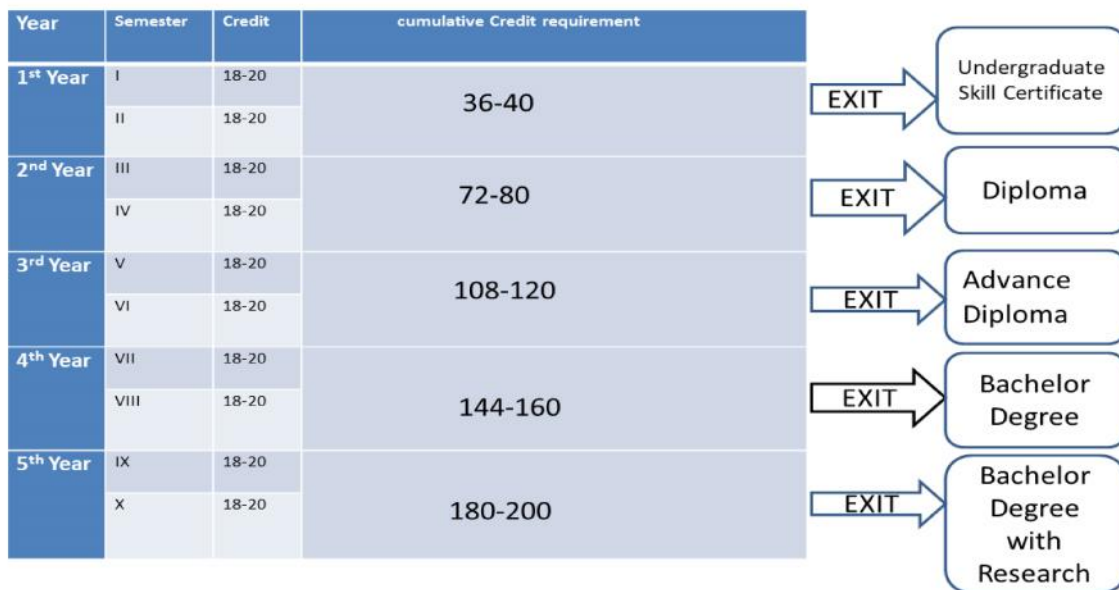


## 10. Multiple Exit Options

### Programme Structure B.Tech.



### Programme Structure B.Arch.



## 11. Registration

- 11.1 Every student of the B. Tech/ B. Arch/ Dual Degree Program is required to be present and register at the commencement of each semester on the day fixed for and notified in the Academic Calendar. A student can register while studying in odd semester by the courses offered in odd semester only. Similarly students studying in even semester can register in the courses offered in the even semester only. Any wrong registration detected at any stage later on, will be treated as null and void. This rule is not applicable for registration in special examination.
- 11.2 Registration of student for First (Autumn) Semester will be centrally organized by the Academic Section of the Institute. For all other semesters the registration will be organized departmentally under the supervision of the Head of the Department.
- 11.3 A student has to register on the day announced as per academic calendar in person. He/she has to submit registration slip in the department in person. In exceptional circumstances, late registration may be allowed for next two working days with fine as fixed by the institute.
- 11.4 Only those students will be permitted to register who have:
- cleared all Institute and Hostel dues of the previous semesters,
  - paid all required prescribed fees for the current semester, and
  - not been debarred from Registering for a specified period on disciplinary or any other ground.

The Institute reserves right of cancellation of registration due to disciplinary reasons/ non fulfilling academic criteria for any program/ semester etc.

### Adding and Dropping Course(s)

With the approval of the Dean (Academic) on the recommendation of HoD, student can add or drop courses within a week from the closing date of registration.

- Adding courses is possible only within the upper limit that is maximum credits and available seat in that course.
  - Once the student registers for some and does not attend the course, he/ she will be awarded with "X" grade.
- 11.5 **Minimum requirement for promotion to higher Semester and continue in the program:** All students admitted in B. Tech/ B. Arch/ Dual Degree Program will be promoted to next succeeding year irrespective of CGPA subject to the condition that student appears minimum 70% (round off) of total number of registered papers in the current session. A student will become eligible for award of degree as detailed under section 14.12 and 15.
- 11.6 *Total registered Course credit of a student should not* be more than 31 credits in a semester. If by addition of regular/ debarred/ incomplete course total registered credit exceeds 31, then in that case some of the previous semester courses may be deferred for next session.
- Student, who has a backlog in a subject, may register in another similar subject to that respective HoD recommends the same to Dean (Academic) and approval of the same.**
- In case of student debarred due to adopting unfair means at examination or due to any disciplinary action in the previous Autumn/ Spring Semesters, he/ she may be permitted to get registered only after he/ she become eligible for registration with maximum 31 credits.**
- 11.7 A student who has been debarred from appearing at an examination due to any of the following reasons:
- as per recommendation of the subject teacher for unsatisfactory attendance
  - by the Institute as a measure of disciplinary action
  - for adopting malpractice at an examination, and consequently awarded a grade 'F',
- The Student may re-register for the subject(s) after the term of the debarment expires, provided that other provisions of this regulation do not prevent him.
- With the concurrence of the Faculty Adviser a student may be allowed to change his/her registration of subjects within one week from the last day of registration.
- 11.8 Any teaching, examination, academic evaluation, etc. of a student will be done only when he/she is registered regularly in all previous semesters of his/her UG Program.

## 12. Grading System

12.1 As a measure of students' performance based on 10 point scale, there are 7 grades as follows:

Performance	Letter grade	Grade point per credit
Excellent	A+	10
Very good	A	9
Good	B	8
Fair	C	7
Average	D	6
Pass	P	5
Fail	F	0
Incomplete	I	0
Debarred	X	0

The two transitional grading symbols (I & X) may be used by the examiners to indicate the special position of a student in a subject/ course:

- I - Awarded for 'Incomplete assessment', to students who did not appear at End Semester Examination for subject. All such students are required to inform in Advance to the Examination Section, with valid reasons for their absence with documentary evidence.
- X - Awarded for 'Debarred' courses, due to Shortage of attendance i.e. attendance below 75% in subject. For all debarred courses a student is required to again re-register for the courses, attend classes and appear for all assessments.

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

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

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, and 'g<sub>i</sub>' is the grade – points carried by the letter corresponding to the grade awarded to the student. **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.

12.3 Starting from the second semester at the end of each semester's, a Cumulative Grade Point Average (CGPA) will be computed for every student as follows:

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

Where 'm' is total number of subjects the student has registered from the first semester onwards up to the current semester, 'c<sub>i</sub>' is the number of Credits allotted to a particular subject ('s<sub>i</sub>') and 'g<sub>i</sub>' is the grade - point of the corresponding grade letter of the subject 's<sub>i</sub>' awarded to the student. **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.

For determining the *inter se* merit ranking of a group of students, only the rounded off values of the CGPAs will be used.

12.4 **Course Credit Transfer, if earned at other Institute/ University/online:**

If any student enrolled for the program is permitted to go to any other institute/ university within the country or abroad (under some exchange Program or otherwise), then all credit earned at that Institute/ University shall be transferred under credit earned. If the evaluation of course/ research work done has not been done at other Institute then same shall be evaluated at NIT Patna for its equivalent credit and earned credit shall be credited to the student academic record.

### 13. **Assessment of Performance:**

13.1 There will be continuous assessment of a student's performance throughout the semester and grades will be awarded by the subject teacher(s) / co-ordination committee formed for this purpose. This constitution of the co-ordination committee is given in *Appendix - VI*.

- 13.2 a) Final Grade will be awarded by the concerned teacher based on relative grade system of the Institute. Details of credit of a course based on Lecture, tutorial and practical (L-T-P) class per week and its weightage (Full Marks) for evaluation is detailed at *APPENDIX – VII*.
- b) For assigning mark in Class Assessment (C.A.) performance in home assignments, class-tests, tutorials, viva-voce, attendance (though no marks is given for attendance at present) etc. are to be considered. At least two class tests/assignments are to be conducted for a subject. The subcomponent of evaluation and their respective weights assigned to are given below.

<u>Theory Evaluation Components</u>	<u>Subcomponents</u>	<u>Weighting factor</u>
Class Assessment (TH_CA)	Class Attendance	Nil
	Assignment/ Class Test- I	5%
	Assignment/ Class Test- II	5%
	Mid-Semester Exam.:	30%
End-semester Examination (TH_ESM)		60%

- c) For assigning marks in the laboratory component (P - component) the relevant subcomponents that are to be considered are: day-to-day work, regularity, tests (at least two test must be conducted), assignment, viva-voce etc. percentage weight of the different subcomponents in deciding the final marks are to be announced at the beginning of the semester. The subcomponent of evaluation and their respective weights assigned to are given below.

<u>Practical Evaluation Components</u>	<u>Subcomponent</u>	<u>Weighting factor</u>
Class Assessment (PT_CA)	Class Attendance	Nil
	Class performance	15%
	Practical Report	15%
	Practical Internal Viva voce	10%
End-semester Examination (PT_ESM)		60%

- d) **Class Attendance marks in theory and Practical subjects/ components shall be “NIL” but 75% attendance is mandatory to appear at End semester Examination.**

#### 13.3 **The evaluation procedure for Industrial Training/ Seminar/ Project/ Dissertation etc.**

The four to six-week industrial training undergone by the students in the summer vacation after the sixth 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 and on the basis of which a grade would be awarded. The students are also required to submit to Head of the Department a completion certificate, in the prescribed form from the Competent authority of the organization where the training was received, without which he/ she would not be assessed.

- i) The Placement and Training (P & T) Cell of the institution shall notify the list of organization(s) with number of seats available for students of different branch with stipend and/or without stipend. The allotment of seats in those industries notified shall be done on merit/ inter-se-merit of the applicants/ students of different branch, who have applied for the same.
- ii) If any student is desirous to undergo Industrial Training at an Industry/ Institute/ Organization of his/ her choice/ preference, then a letter of recommendation shall be issued by the P & T Cell containing details of requirement and necessary guidelines for the Industry/ Institute/ Organization.

- iii) Students may join different value addition courses of minimum six weeks duration at the institute or at other institution/ organization, that shall be treated as equivalent to Industrial Training and evaluation shall be done as per clause 13.3 only. The head of the department (HOD) of concerned department shall be competent to decide regarding equivalence of such value addition course. The HOD shall forward application of students through the Dean Academics, and issue different certificates after verification to enable him/ her to join the course/ program in lieu of Industrial Training.
- iv) The students may apply for appearing at different tests organized by different Industry / Institution / organization of repute for selection of student's industrial training with stipend. The HOD concerned shall provide all necessary support and issue certificate to enable him/ her to join the training program at industry during summer vacation.

#### 13.4 **Assessment of Project Work of B.Tech/B.Arch/Dual Degree Programme**

Performance in the various activities in the project would be assessed individually at the end of semester in which it is being carried out as per the curriculum. The students must submit a written report. The Head of the Department would appoint a project evaluation board to conduct final viva-voce exam.

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

Stages	Details of Stages	Min. time allocation	Marks allocated (in Percentage)	Assessment Committee
Stage-I	Project Proposal, Problem Definition, Proposed Methodology	Mid Semester Exam.	40	Project supervisor
Stage-II	Project Report/Thesis	End Semester Exam.	10	Project Evaluation Board
	Final Project Evaluation	End Semester Exam.	50	

*Dates for conducting the seminar and the viva voce, to be held within ten days after the end - semester examination, would be announced in the academic calendar.*

If student due to non - completion of the project work cannot submit the final project report at the end of eighth semester for B. Tech. and tenth semester for B. Arch program and does not appear before the evaluation board for the viva voce on the date fixed by the department in conformity with the academic calendar, may be granted extension of time not exceeding two months.

## 14. **Examination**

14.1 The Examination Section of the Institute will centrally conduct the Mid - Semester and the End - Semester Examinations of registered subjects.

14.2 All examination work such as paper setting, evaluation and result preparation for the courses offered by any department shall be done by the faculty of the respective departments to avoid delay in evaluation and publication of result.

The paper setting for End Semester Examination shall be done by the Internal faculty who is teaching the course or by Course Coordinator (if same course is being taught by more than one faculty in different sections) of the course nominated by the Head of the Department.

If question paper is not submitted in time due to certain unavoidable reasons, then question paper of such subjects may be set by a faculty nominated by the Head of the department.

14.3 (a) A student will be issued an Admit Card for appearing in examination

(b) A student may be debarred from appearing at End – Semester Examination if his/ her attendance at lecture/ tutorial/ laboratory classes has not been satisfactory as per clause 5.

(c) A student may be debarred from appearing at Mid- Semester or End – Semester or Special examination if he/ she is found using unfair practice during the examination, under the provisions of the categories of unfair practice/ unfair means detailed at Appendix –XII.

- 14.4 Class tests, assignment, tutorials, viva - voce, laboratory assignments, etc., are the constituent components of continuous assessment process, and a student must fulfill all these requirements as per course requirement.

**Appearing in the end - semester examination of theory as well as Practical subject is compulsory for a student.** If a student fails due to a compelling reason like serious illness of himself/ herself or a calamity in the family to appear in the end semester examination, but his performance and attendance is satisfactory then he/ she will be assigned an '**I**' grade in the subject. He/she **will be permitted to register and appear at the special examination provided** he/ she appeals to the Dean (Academic), through respective HoD.

- 14.5 Students will be permitted to appear in the examination in only those subjects for which they have register at the beginning of the semester and have not been debarred.
- 14.6 The final marks/grades awarded to the students in the subject must be submitted through online portal of the examination by the teacher/chairman, co-ordination committee. The same marks/grades should also be submitted to the concerned Head of the Department and Associate Dean (Examination).
- 14.7 The evaluation of performance in the Extra Academic Activities (EAA) will be done by the authorities conducting these. The grades will be communicated to the Associate Dean (Examination) by the following authorities through the Coordinator of EAA and through NSS/ NSO Head NSS/ Dean (Student Affairs) for NSS/ NSO.
- 14.8 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/ chairman, co-ordination committee, through the Head of the concerned Department within 20 (twenty) days from the date of publication of result.

14.9 **Provision of Inspection Mid/ End Semester Answer Book**

The procedure as outlined below shall be adopted for inspection / display of answer scripts.

- i) 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 must be completed before Commencement of the End semester examination.
  - ii) The students may inspect their End semester answer book(s) after completion of evaluation process, but opportunity of inspection shall limit to two days after evaluation is completed. Thereafter the marks shall be considered final and shall be tabulated and grades shall be awarded.
- 14.10 In order to provide additional opportunity to the students who failed (obtained 'F' grade) in one or more **theory and/ or practical subjects in either the autumn and/or the spring semester of an academic session,**
- (i) Special Examinations will be arranged centrally by the Examination Section, and will be conducted in the month of July (before commencement of the next session) every session. Regulations relating to the Special Examination are given in *Appendix - X*.
  - (ii) If the student fails in Special End semester examination also then he/ she may undergo through the process let down in clause 11.5.
  - (iii) If a candidate has failed in a subject, **has registered to appear under the regulation in clause 11.5 and** due to some reason that course is not being offered in current academic session, then candidate shall have to get registered in the same subject but allowed to attend classes for the equivalent subject approved by the concerned Department and appear for all assessments for the registered subject.
- 14.11 A student in any degree Programme must complete the prescribed course work for ***B. Tech Program of the eight semesters with 160 credits, B. Arch. of ten semesters with 200 credits and Dual Degree Programme with 200 credits.***

## 15. Graduation Requirement

In order to qualify for a B. Tech/ B. Arch. Degree of the Institute covered under these Regulations a student must:

a) The Minimum Credit Requirement to be offered by the Engineering/ Technology departments and Architecture department for different program shall be as follows with a minimum grade 'P' scored in every subject:

Program	Session 2021-22 and onward
B.Tech	Minimum 160 credits
B.Arch	Minimum 200 credits
Dual Degree	Minimum 200 credits

b) Have cleared all dues to the Institute, Hostel, Library, Laboratory, Center, Department etc.

## 16. Withdrawal from the Institute

16.1 A student who has been admitted to a degree course of the Institute may be permitted 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 etc. which compelled him to avail temporarily withdrawal, provided:

- He/ She applies to the Institute within 15 days of the commencement of the semester or from the date he/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.
- The permission of the withdrawal is given if the Institute is satisfied that, inclusive of the period of withdrawal,
- There are no outstanding dues or demands from him/her by the Institute/ Hostel/ Department/ Library/ Gymkhana/ EAA/ NSS.
- Dues Clearance:** Each department/Center/Section etc. must submit dues list to Dean (Academic) before starting End Semester. All requests for grant for permission of clearing dues (if any) or NO DUES Certificate will be approved by the respective department/Section/Center and submitted to Academic section for final permission and approval.

S. No.	Requirement of Clearing Dues	Clearing of Dues/ No Dues Certificate to be Submitted	Authority for grant of Clearing and Permission
1.	Cancellation of Admission (before Registration to the Program)	Exempted from submission of NO Dues Certificate	Convener/In Charge Admission Committee
2.	Before Registration to a Semester	From Accounts, Hostel, Library	Chairman HMC and Prof-in-charge (Library)
3.	Withdrawal from a Program (after Registration to the Program)	From all departments Library and Hostel etc.	All HOD(s), Chairman HMC, Prof-in Charge (Library) and all Service In-charge(s).
4.	For issues of Final End Semester Exam Grade Card & Provisional Certificate	From all departments Library and Hostel etc.	HOD(s), Chairman HMC, Prof-in Charge (Library) and all Service In-charge(s).
5.	Award of Degree/ Migration Certificate	From all departments Library and Hostel etc.	All HOD(s), Chairman HMC, Prof-in Charge (Library) and all Service In-charge(s).

16.2 A student who has been granted temporary withdrawal from the Institute under the provisions of clause 16.1 **will be required to pay the Registration fee for the intervening period** till such time as his/ her name is borne on the Roll List.

## 17. Institute Medals and Prizes

The senate has the authority to decide and change the rules for Institute medals, prizes and certificates as and when required from time to time, following the guidelines/ rules (as framed in 9<sup>th</sup> Senate) for award of Medal(s) and Certificates.

### Institute Gold Medal(s) and Certificate(s) to Graduating Candidates

For Award of Gold medal in any program, a candidate must have CGPA $\geq$ 9

- a) The candidates graduating from the Institute shall be awarded Gold Medal in following categories in each academic Session and **shall also be given Academic Merit Certificate** in the Convocation for that Session
  - (i) **Bachelor's program: Overall Topper** (from amongst all Branch Toppers)
  - (ii) **Bachelor's program: Branch Topper(s)** from each discipline/ Branch.
- b) Branch topper of the Program: Recipient's name from different program(s) is to be decided based on merit i.e. CGPA of the Candidates graduating in that academic session.
- c) If the result of any program gets delayed due to unavoidable reasons or evaluation procedure etc., then the Program topper(s) from department(s) shall be notified after publication of result. Therefore award of Gold medal for the Program shall be done in next academic session Convocation only.
- d) The selection of candidate for award of gold medal will be done based on merit as detailed below for determining inter-se-merit and merit rank within Program and discipline/ department.
  - (i) The candidate must have **passed all semester examinations for the program in first attempt and within the time period as prescribed for any Degree program(s).**
  - (ii) It was also resolved that Gold Medal will be awarded only if number of students passing in any programme are more than or equal to 5 (five) and the CGPA of the topper is equal or above 9.0 (nine).
  - (iii) The candidate **must not have been involved in any act of indiscipline or had not been punished/ awarded punishment for an act of indiscipline or adopting unfair practice or unfair means at any examination during his/ her stay at the Institute.** However an act of indiscipline by students' en-masse due to certain reasons may be treated differently compared to an act of indiscipline committed by an individual student.
  - (iv) The candidate **must have highest CGPA among all students who have graduated from the Institute within the time limits for the respective program.**
  - (v) If there is more than one student's having same final CGPA their rank will be decided on the basis of CGPA of 7<sup>th</sup> Semester and so on.
  - (vi) Candidates graduating i.e. **completing the program in more time than prescribed time for the program shall be listed with merit rank lower than all such students who have graduated in time.**
  - (vii) If any student due to medical reasons or any other valid reason(s) had missed the end semester examination and has been permitted to appear at Special examination during his/ her stay in the Institute, then he/ she shall not be considered for award of any medal/ certificate of the Institute decided on the basis of academic records.
  - (viii) Over all Topper of the program shall be decided on the inter-se-merit of the students for Branch Topper(s) as stated above under respective under graduate.
- e) The Institute shall notify the name(s) and other details of the topper(s) and overall topper for different program, and place the notification for information to all degree recipients and other concerned. Further objections or any claim for discrepancies from stake holder for consideration will be invited within 15 days with supporting documents for consideration i.e. within 15 days from the date of notification.

If no objection/claim is received then the Medal recipient's list shall be considered final. However if any claim is received the same will be verified and corrected (in case of error) by the Dean (Academics) and approved by the chairman Senate.
- f) Rank of each student in their respective branch will be indicated on the Grade card for those students who passed out within the stipulated time of their course.



## 18. **Issuance of Transcript/ Degree/ Recommendation or any other Certificate**

Transcripts are records of the student's academic performance. These are most valuable private and sensitive documents. Utmost care is taken in recording, storing and issuance. The following are the guidelines for issuance of transcripts and certificates:

- (i) No student record shall be shown or given to a third party without written consent of the student. The Institute may have discretionary exceptions to this.
- (ii) No transcripts shall be issued against request made through third parties, i.e. representatives, friends or relatives, agencies etc.
- (iii) In exceptional cases transcripts may be issued on the request of a third party meeting the following conditions:
  - (a) The party must carry a power of attorney/ letter of authority with photograph of the person who has been authorized and attested by the student.
  - (b) The third party must produce affidavit from competent authority to the effect that he/ she assumes full responsibility for any disputes arising from the possibility that the Dean's/ Registrar's office is misled in sending transcripts to persons who have no legal claims over the document.
  - (c) The third party will be required to put his/ her thumb impression on the said affidavit.
  - (d) The third party will not demand that the transcripts be given to him/ her.
  - (e) The transcript shall be dispatched to the student's permanent address by registered/ Speed post only in a sealed envelope.
- (iv) Degree and other certificate are issued by the Dean's Office/ Registrar Office/Exam office shall be delivered to the student or shall be sent by registered/ speed post to his/ her permanent address only.
- (v) Upon the request of the students, the Dean (Academics) office issues the letter of attendance and other certificates. For all such certificates there is a service charge fixed and is required to be deposited in institution.
- (vi) The Duplicate copy of any certificate(s) related to exam and academic section will be issued on payment of Rs. 1000/- or fixed by the competent authority time to time. The additional transcript copy will be issued on payment of Rs. 500/- per copy.
- (vii) Request for issue of Duplicate copy of any document such as Degree, Migration, certificate and Provisional Degree etc. must carry Affidavit and Fee fixed for it.
- (viii) The grade card / transcript shall be issued by the signature of Associate Dean (Exam) and verification by Verifying Officer.
- (ix) Grade Card of each student will also have information about course code, course title, L-T-P, Credit, Grade, number of attempt(s), SGPA/CGPA (Annexure-XV).
- (x) Transcript of each student will also have information about course code, course title, L-T-P, Credit, Grade, Grade Point, Earned Credit, Number of attempt(s), SGPA/CGPA (Annexure-XV).
- (xi) The postal charge (inland /abroad) fixed by the competent authority should be borne by the student.

## 19. **Waiver/Relaxation of Requirements**

The procedures and requirements stated in this regulation may be waived by the Chairman, Senate under special circumstances for cogent reasons. The ground on which such waiver/relaxation is granted shall invariably be recorded and cannot be cited as precedence.

## **APPENDIX - I**

### **Rules Relating To Residence Requirements**

Following are the detailed rules governing residence requirements of students:

- a. 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.
- b. No married accommodation shall be provided to any student of the undergraduate courses.
- c. No student shall come into or give up the assigned accommodation in any Hostel without the prior permission of the Chairman, Hostel Management Committee (HMC)
- d. 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.
- e. Students shall be required to make their rooms available whenever required for inspection, repairs, maintenance or disinfection and shall vacate the rooms when leaving for the vacations /holidays.
- f. Students shall be responsible for the proper care of the furniture, fan and other fitting in the rooms allotted to them and shall generally assist the Warden in ensuring proper use, care and security of those provided In the Hostels for common use of all students.
- g. Students will 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.
- h. Engaging personal attendants, keeping pets and use of appliances like electric heater, refrigerator etc. by a student in the Hostel is prohibited.
- i. All students must abide by the rules and regulations of the Hostel as may be framed from time to time.
- j. Student should not use heater, or similar electrical appliances. If found, a fine of Rs. 2000/- and/or expulsion from hostel may be imposed.
- h. In addition to above, Students are required to abide by the rules and regulations framed by the institute time to time.

## APPENDIX – II

### Rules Regarding Attendance

Following are the rules relating to attendance at classes:

1. Attendance in all classes (lectures + tutorials, laboratories, workshops, EAA including its related camps and other publicized activities etc.) are compulsory. A student may be debarred from appearing at an examination on the ground of unsatisfactory attendance.
2. **The teacher concerned may condone absence from classes for a very short period subject to maximum of one week due to unavoidable reasons** provided he/she is satisfied with the explanation.
3. a) If the **period of absence is for a short duration (of not more than two weeks) application for leave shall have to be submitted to the Head of the Department concerned** stating fully the reason for the leave requested for along with supporting document(s) the Head of Department will grant such leave.  
b) **Absence for a period not exceeding two weeks in a semester due to sickness or any other unavoidable reason for which prior application could not be made may be condoned by the Head of the Department** provided he is satisfied with the explanation.
4. If the **period of absence is likely to exceed two week, a prior application for grant of leave will have to be submitted through the Head of the Department to the Dean (Academic)**, with the supporting documents. The decision to grant or condone such leave shall be taken by the Dean (Academic) after considering the recommendation of the Head of Department.
5. It will be the responsibility of the student to get his absence from classes condoned by the appropriate authority.
6. A student must intimate his/her absence to the Warden of the Hostel in which he/she is residing, before availing of any leave. Failing to do so will be construed as breach of discipline and will be dealt with as per provision in *Appendix - III*.
7. In case of natural calamity/ illness/ family problem etc. the condonation / relaxation in Attendance requirement shall be decided by the committee constituted for the purpose.
8. **Late Registration or condonation allowed on any ground does not permit compensation in marks for attendance or in marks for internal evaluation.**

## APPENDIX – III

### Rules Regarding Conduct and Discipline

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

1. Students shall show due respect to the teachers/staff of the Institute, the Wardens of the Hostels, 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. They shall also pay due attention and courtesy to visitors.
2. Students are required to develop a friendly relationship with fellow students. In particular, they are expected to show kindness and consideration to 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.
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
  - Ragging as defined by Hon'ble Supreme Court Order(s) writ application No. (C) 656/1998.
  - Furnishing false statement of any kind in the form of application for admission or for award of scholarship etc.
  - Displaying lack of courtesy and decorum; resorting to indecent behavior anywhere within or outside the campus.
  - Willfully damaging or stealthily removing any property/ belongings of the Institute, Hostel or fellow students.
  - Possession, consumption or distribution of alcoholic drinks of any kind of hallucinogenic drugs
  - Adoption of unfair means in the examination.
  - Organizing or participating in any group activity in company with others in or outside the campus without prior permission of the Dean of Students' Welfare.
  - Mutilation or unauthorized possession of library books.
  - Resorting to noisy and unseemly behavior, disturbing studies of fellow students.
  - 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, expulsion from the Hostel, debarment from an examination, rustication for a specified period or even outright expulsion from the Institute.

4. For an offence committed (a) in the 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 Institute Disciplinary Committee.
5. (a) All major acts of indiscipline, which may have serious repercussion on the general body of students and/or which may warrant a uniform and more formalized nature of investigation, shall be conducted by the Standing Institute Disciplinary Committee. The standing Disciplinary Committee consists of the following ex-officio and other members:

(i) Dean of Students' Welfare	Chairman
(ii) Director's Nominee	Members
(iii) Chairman, Hostel Management Committee	Member
(iv) Warden of the Hostel of which the student concerned is a boarder	Member
(v) One Faculty nominated by the Senate by rotation for two years	Member
(vi) Two (One Girl and One Boy) Student representative nominated by Dean, Students' Welfare for one year	Member
(vii) The Registrar	Member Secretary

In addition, the Chairman may invite any other person(s) to be associated with the proceedings of a particular case, if their participation is 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.

6. Cases of adoption of unfair means in an examination shall be dealt with by the committee on Examination Malpractice consisting of the following members:

(i) Dean (Academic)	Chairman
(ii) Head of the Department to which the reported student belongs	Member
(iii) The Invigilator(s) reporting the case	Member
(iv) The subject teacher concerned	Member
(v) Two members of faculty nominated by the Director for a term of two years	Member
(vi) Associate Dean (Examination)	Member Secretary

The Committee shall recommend appropriate measures in each case to the Chairman of the Senate for awarding the punishment.

7. Unfair means and Malpractice at Examination

If any student is found involved in malpractice and unfair-means practice at Mid Semester or End Semester Examination then

- The Invigilator(s) are required to submit a detailed report to the Associate Dean (Examination), regarding nature of malpractice and/ or Unfair-means adopted by the student with relevant evidence (if any) with signature of the invigilators.
- Action may also be taken as per rules of Unfair Means and Malpractices.
- The answer sheet with a copy of report is required to be sealed in separate envelop and placed before the Unfair-means Committee for necessary decision and recommendation of action.
- The details of category and punishment in different case of malpractice and Unfair-means cases are placed at **Appendix – XII**.

8. **Stay-out or Walk-out from Examinations**

**Students are expected to appear at the examination as per schedule notified, and any grievance with respect to question paper or any other matter related to the examination be discussed with the HOD after the examination and submit their representation** with signature of all those students who have something to say regarding the examination question paper difficulties. Any kind of disturbance or **staging WALK-OUT shall be considered as a serious act of indiscipline.**

There shall be **no re-examination, if student(s) STAY-OUT/ WALK-OUT from the examination hall.** However in special circumstances the issue of **re-examination of courses/ subjects (theory and/ or Practical) for student(s) who have STAYED-OUT or WALKED-OUT from the examination shall be decided by a Competent Committee** constituted for the purpose.

9. **Phenomenon of Mass Absenteeism**

On noticing the Phenomenon of frequent mass absenteeism by students the faculty concerned must make a written report to HOD about the class and group of such students. The HOD will forward the report to the Dean (Academics) for action as recommended below:

- On first mass absenteeism in the subject Warning shall be issued.
- On second instance of absenteeism 5 marks will be deducted from all courses as punishment.

## APPENDIX – IV

### Rules for Change of Branch

1. A student admitted to a particular branch of B.Tech program will normally continue studying in that branch till completion.
2. However, in special cases the Institute may permit a student, admitted in B.Tech program, to change from one branch of studies to another after the first two semesters. Such changes will be permitted, strictly in accordance with the provisions laid down hereinafter.
3. Only those students will be eligible for consideration for a change of branch after the Second (Spring) Semester, who have-
  - (a) **Completed all the credits prescribed in the first and second Semester of their studies, in their first attempt i.e. without appearing in the special examination and/ or summer quarter examination.**
  - (b) Obtained a **CGPA, at the end of the Second (Spring) Semester, not lower than 8.5** for a change to another Engineering discipline
4. Students admitted to 4 - Year B. Tech. Programs are eligible for consideration for a change of branch to any other Engineering Program.

Application for a change of branch must be made by intending eligible students in the form prescribed for this purpose. The Dean (Academic) will call for application sometime in the Spring Semester of each academic year and the completed forms must be submitted to him by the last date specified in his notification.
5. Students may enlist up to five choices of branch, in order of preference, to which they wish to change over. It will not be permissible to alter the choices after the application has been submitted.
6. Change of branch shall be made strictly on the basis of *inter se* merit of the applicants. For this purpose the CGPA obtained at the end of the second (Spring) Semester shall be considered. Ties will be broken by the JEE (Mains) All India rank awarded to applicants. Candidates are required to submit application with self-attested photocopy of Grade card and JEE (Main) Rank card.
  - a) The applicants may be allowed a change of branch, strictly in order of *inter se* merit, subject to the limitation that the actual number of students in the third (Autumn) Semester, in the branch to which the transfer is to be made, **does not exceed 110% (rounded to lower integer) of the sanctioned yearly intake for that Branch.**
  - c) **Also such change from any branch is to be made keeping in view that the total strength of the branch does not fall below 80% (rounded to lower integer) of the sanctioned yearly intake for that branch.**
7. All changes of branch made in accordance with the above rules will be effective from the Third (Autumn) Semester of the applicants concerned. No changes of branch shall be permitted here after.
8. All changes of branch will be final and binding on the applicants. No student will be permitted, under any circumstances, to refuse the change of branch offered.

## APPENDIX – V

### UG Curricula as per NEP 2020 implemented w.e.f. 2021-22 for 1<sup>st</sup> And 2<sup>nd</sup> Semester of B. Tech/B.Arch./Dual Degree Program

#### B. Arch. (Architecture) 1<sup>st</sup> year Course Structure

##### First Semester

Code	Title	L	T	P	Credit	Dept.
AR11101	Basic Architectural Design	2	0	4	4	AR
AR11102	Introduction to Architecture	3	0	0	3	AR
AR11103	Architectural Graphics & Visual communication	1	0	4	3	AR
AR11104	Architectural Workshop	1	0	4	3	AR
AR11105	Building Materials	3	0	0	3	AR
MA11103	Engineering Mathematics	3	0	0	3	MA
EAA11102	EAA -II Swachha Bharat Mission(SBM)	0	0	2	1	AR/IC/SAC
				<b>Total -</b>	<b>20</b>	

##### Second semester

Code	Title	L	T	P	Credit	Dept.
AR21106	Architectural Design & Field Study-I	3	0	6	6	AR
AR21107	Building Construction -I	1	0	4	3	AR
AR21108	Principles of Architecture	3	0	0	3	AR
AR21109	Computer Application in Architecture -I	1	0	4	3	AR
HS21101	Communicative English	3	0	2	4	HSS
EAA21101	EAA- I Sports/Innovative Project/NCC/NSS	0	0	2	1	AR/IC/SAC
				<b>Total -</b>	<b>20</b>	

**B. Tech. (Civil Engineering) 1<sup>st</sup> year Course Structure**

**First Semester**

Code	Title	L	T	P	Credit	Dept.
PH13101	Engineering Physics	3	0	2	4	PH
CS13101	Information Technology Fundamentals	3	0	2	4	CS
HS13101	Communicative English	3	0	2	4	HSS
CE13102	Computer Aided Civil Engineering Drawing	0	0	4	2	CE
CE13103	Engineering Mechanics	3	0	0	3	CE
ME13102	Workshop Practice - I	1	0	2	2	ME
EAA13101	EAA- I Sports/Innovative Project/NCC/NSS	0	0	2	1	CE/IC/SAC
		<b>Total -</b>			<b>20</b>	

**Second semester**

Code	Title	L	T	P	Credit	Dept.
MA23101	Engineering Mathematics	3	1	0	4	MA
CH23101	Engineering Chemistry	3	0	2	4	CH
CE23102	Building Materials and Construction Techniques	2	0	2	3	CE
CE23103	Survey and Surveying Lab	2	0	3	4	CE
CE23104	Environmental Science and Building Sanitation	1	0	2	2	CE
CE23105	Elements of Civil Engineering	2	0	0	2	CE
EAA23102	EAA -II Swachha Bharat Mission(SBM)	0	0	2	1	CE/IC/SAC
		<b>Total -</b>			<b>20</b>	



**B. Tech. (Computer Science & Engineering) 1<sup>st</sup> year Course Structure**

**First semester**

Code	Title	L	T	P	Credit	Dept.
CS14102	Programming in C	3	0	2	4	CS
MA14102	Engineering Mathematics	3	1	0	4	MA
CH14101	Engineering Chemistry	3	0	2	4	CH
EC14102	Digital Design	2	0	2	3	EC
CS14106	Information Technology Workshop	3	0	2	4	CS
EAA14102	EAA -II Swachha Bharat Mission(SBM)	0	0	2	1	CSE/SAC
<b>Total -</b>					<b>20</b>	

**Second Semester**

Code	Title	L	T	P	Credit	Dept.
CS24107	Web Technology	2	0	2	3	CS
HS24101	Communication English	3	0	2	4	HSS
PH24101	Engineering Physics	3	0	2	4	PH
CS24104	Data Structures	3	0	2	4	CS
CS24105	Object Oriented Programming	3	0	2	4	CS
EAA24101	EAA- I Sports/Innovative Project/NCC/NSS	0	0	2	1	CSE/SAC
<b>Total -</b>					<b>20</b>	

**B. Tech. (Electronics and Communication Engineering) 1<sup>st</sup> year Course Structure**

**First semester**

Code	Title	L	T	P	Credit	Dept.
CH15101	Engineering Chemistry	3	0	2	4	CH
MA15102	Engineering Mathematics	3	1	0	4	MA
CS15101	Introduction to Computing	3	0	2	4	CS
EC15102	Elements of Electronics Engineering	3	0	2	4	EC
EC15103	Electronics Workshop	2	0	2	3	EC
EAA15102	EAA -II Swachha Bharat Mission(SBM)	0	0	2	1	ECE/SAC
<b>Total -</b>					<b>20</b>	

**Second Semester**

Code	Title	L	T	P	Credit	Dept.
PH25101	Engineering Physics	3	0	2	4	PH
HS25101	Communicative English	3	0	2	4	HSS
EE25101	Elements of Electrical Engineering	3	0	2	4	EE
CS25102	Computer Hardware and Networking	2	0	2	3	CS
EC25102	Fundamental Of Communication Engineering	3	0	2	4	EC
EAA25101	EAA- I Sports/Innovative Project/NCC/NSS	0	0	2	1	ECE/IC/SAC
<b>Total -</b>					<b>20</b>	

**B. Tech. (Electrical Engineering) 1<sup>st</sup> year Course Structure**

**First semester**

Code	Title	L	T	P	Credit	Dept.
CS16105	Introduction to Computing	3	0	2	4	CS
PH16101	Engineering Physics	3	0	2	4	PH
HS16101	Communicative English	3	0	2	4	HSS
EE16105	Elements of Electrical Engineering - I	3	0	2	4	EE
EC16102	Elements of Electronics Engineering	3	0	2	4	EC
EAA16101	EAA - I Sports/Innovative Project/NCC/NSS	0	0	2	1	EE/IC/SAC
<b>Total -</b>					<b>21</b>	

**Second Semester**

Code	Title	L	T	P	Credit	Dept.
CH26101	Engineering Chemistry	3	0	2	4	CH
MA26101	Engineering Mathematics	3	1	0	4	MA
EE26105	Elements of Electrical Engineering - II	3	0	2	4	EE
EE26106	Electrical Workshop	1	0	2	2	EE
EC26105	Electronics Workshop	1	0	2	2	EC
ME26101	Engineering Graphics	1	0	2	2	ME
EAA26102	EAA-II Swachh Bharat Mission (SBM)	0	0	2	1	EE/IC/SAC
<b>Total -</b>					<b>19</b>	

**B. Tech. (Mechanical Engineering) 1<sup>st</sup> year Course Structure**

**First Semester**

Code	Title	L	T	P	Credit	Dept.
HS12101	Communicative English	3	0	2	4	HSS
PH12101	Engineering Physics	3	0	2	4	PH
ME12101	Engineering Graphics	2	0	2	3	ME
ME12102	Workshop Practice - I	2	0	2	3	ME
ME12103	Introduction to Metal Machining Processes	1	0	2	2	ME
ME12104	Engineering Mechanics	3	0	0	3	ME
EAA12101	EAA-I Sports/Innovative Project/NCC/NSS	0	0	2	1	ME/IC/SAC
		<b>Total -</b>			<b>20</b>	

**Second semester**

Code	Title	L	T	P	Credit	Dept.
CS22101	Fundamentals of Information Technology	3	0	2	4	CS
MA22101	Engineering Mathematics	3	1	0	4	MA
CH22101	Engineering Chemistry	3	0	2	4	CH
ME22101	Elements of Mechanical Engineering	2	0	2	3	ME
ME22105	Workshop Practice - II	2	0	2	3	ME
ME22103	Advanced Metal Machining Processes	0	0	2	1	ME
EAA22102	EAA -II Swachha Bharat Mission (SBM)	0	0	2	1	ME/IC/SAC
		<b>Total -</b>			<b>20</b>	

**Computer Science and Engineering with Specialization in Data Science**  
**(5 Years, Bachelor and Master of Technology (Dual Degree))**

**1<sup>st</sup> year Course Structure**

**First semester**

Code	Title	L	T	P	Credit	Dept.
CS14102	Programming in C	3	0	2	4	CS
MA14102	Engineering Mathematics	3	1	0	4	MA
CH14101	Engineering Chemistry	3	0	2	4	CH
EC14102	Digital Design	2	0	2	3	EC
CS14106	Information Technology Workshop	3	0	2	4	CS
EAA14102	EAA -II Swachha Bharat Mission(SBM)	0	0	2	1	CSE/SAC
				<b>Total -</b>	<b>20</b>	

**Second Semester**

Code	Title	L	T	P	Credit	Dept.
CS24107	Web Technology	2	0	2	3	CS
HS24101	Communication English	3	0	2	4	HSS
PH24101	Engineering Physics	3	0	2	4	PH
CS24104	Data Structures	3	0	2	4	CS
CS24105	Object Oriented Programming	3	0	2	4	CS
EAA24101	EAA- I Sports/Innovative Project/NCC/NSS	0	0	2	1	CSE/SAC
				<b>Total -</b>	<b>20</b>	

**Computer Science and Engineering with Specialization in Cyber Security**  
**(5 Years, Bachelor and Master of Technology (Dual Degree))**

**1<sup>st</sup> year Course Structure**

**First semester**

Code	Title	L	T	P	Credit	Dept.
CS14102	Programming in C	3	0	2	4	CS
MA14102	Engineering Mathematics	3	1	0	4	MA
CH14101	Engineering Chemistry	3	0	2	4	CH
EC14102	Digital Design	2	0	2	3	EC
CS14106	Information Technology Workshop	3	0	2	4	CS
EAA14102	EAA -II Swachha Bharat Mission (SBM)	0	0	2	1	CSE/SAC
				<b>Total -</b>	<b>20</b>	

**Second Semester**

Code	Title	L	T	P	Credit	Dept.
CS24107	Web Technology	2	0	2	3	CS
HS24101	Communication English	3	0	2	4	HSS
PH24101	Engineering Physics	3	0	2	4	PH
CS24104	Data Structures	3	0	2	4	CS
CS24105	Object Oriented Programming	3	0	2	4	CS
EAA24101	EAA- I Sports/Innovative Project/NCC/NSS	0	0	2	1	CSE/SAC
				<b>Total -</b>	<b>20</b>	

**Electronics and Communication Engineering with Specialization in Microelectronics and VLSI System Design (5 Years, Bachelor and Master of Technology (Dual Degree))**

**1<sup>st</sup> year Course Structure**

**First semester**

Code	Title	L	T	P	Credit	Dept.
CH15101	Engineering Chemistry	3	0	2	4	CH
MA15102	Engineering Mathematics	3	1	0	4	MA
CS15101	Introduction to Computing	3	0	2	4	CS
EC15102	Elements of Electronics Engineering	3	0	2	4	EC
EC15103	Electronics Workshop	2	0	2	3	EC
EAA15102	EAA -II Swachha Bharat Mission (SBM)	0	0	2	1	ECE/SAC
		<b>Total -</b>			<b>20</b>	

**Second Semester**

Code	Title	L	T	P	Credit	Dept.
PH25101	Engineering Physics	3	0	2	4	PH
HS25101	Communicative English	3	0	2	4	HSS
EE25101	Elements of Electrical Engineering	3	0	2	4	ES
CS25102	Computer Hardware and Networking	2	0	2	3	CS
EC25102	Fundamental Of Communication Engineering	3	0	2	4	EC
EAA25101	EAA- I Sports/Innovative Project/NCC/NSS	0	0	2	1	ECE/IC/SAC
		<b>Total -</b>			<b>20</b>	

**Electrical Engineering with Specialization In Power System Engineering**  
**(5 Years, Bachelor and Master of Technology (Dual Degree))**

**1<sup>st</sup> year Course Structure**

**First semester**

Code	Title	L	T	P	Credit	Dept.
CS16105	Introduction to Computing	3	0	2	4	CS
PH16101	Engineering Physics	3	0	2	4	PH
HS16101	Communicative English	3	0	2	4	HSS
EE16105	Elements of Electrical Engineering - I	3	0	2	4	EE
EC16102	Elements of Electronics Engineering	3	0	2	4	EC
EAA16101	EAA - I Sports/Innovative Project/NCC/NSS	0	0	2	1	EE/IC/SAC
<b>Total -</b>					<b>21</b>	

**Second Semester**

Code	Title	L	T	P	Credit	Dept.
CH26101	Engineering Chemistry	3	0	2	4	CH
MA26101	Engineering Mathematics	3	1	0	4	MA
EE26105	Elements of Electrical Engineering - II	3	0	2	4	EE
EE26106	Electrical Workshop	1	0	2	2	EE
EC26105	Electronics Workshop	1	0	2	2	EC
ME26101	Engineering Graphics	1	0	2	2	ME
EAA26102	EAA-II Swach Bharat Mission (SBM)	0	0	2	1	EE/IC/SAC
<b>Total -</b>					<b>19</b>	



**Mechanical Engineering with Specialization in Manufacturing and Industrial Engineering**  
**(5 Years, Bachelor and Master of Technology (Dual Degree))**

**1<sup>st</sup> year Course Structure**

**First Semester**

Code	Title	L	T	P	Credit	Dept.
HS12101	Communicative English	3	0	2	4	HSS
PH12101	Engineering Physics	3	0	2	4	PH
ME12101	Engineering Graphics	2	0	2	3	ME
ME12102	Workshop Practice - I	2	0	2	3	ME
ME12103	Introduction to Metal Machining Processes	1	0	2	2	ME
ME12104	Engineering Mechanics	3	0	0	3	ME
EAA12101	EAA-I Sports/Innovative Project/NCC/NSS	0	0	2	1	ME/IC/SAC
		<b>Total -</b>			<b>20</b>	

**Second semester**

Code	Title	L	T	P	Credit	Dept.
CS22101	Fundamentals of Information Technology	3	0	2	4	CS
MA22101	Engineering Mathematics	3	1	0	4	MA
CH22101	Engineering Chemistry	3	0	2	4	CH
ME22101	Elements of Mechanical Engineering	2	0	2	3	ME
ME22105	Workshop Practice - II	2	0	2	3	ME
ME22103	Advanced Metal Machining Processes	0	0	2	1	ME
EAA22102	EAA -II Swachha Bharat Mission (SBM)	0	0	2	1	ME/IC/SAC
		<b>Total -</b>			<b>20</b>	

**Civil Engineering with Specialization in Construction Technology and Management**  
**(5 Years, Bachelor and Master of Technology (Dual Degree))**

**1<sup>st</sup> year Course Structure**

**First Semester**

Code	Title	L	T	P	Credit	Dept.
PH13101	Engineering Physics	3	0	2	4	PH
CS13101	Information Technology Fundamentals	3	0	2	4	CS
HS13101	Communicative English	3	0	2	4	HSS
CE13102	Computer Aided Civil Engineering Drawing	0	0	4	2	CE
CE13103	Engineering Mechanics	3	0	0	3	CE
ME13102	Workshop Practice - I	1	0	2	2	ME
EAA13101	EAA- I Sports/Innovative Project/NCC/NSS	0	0	2	1	CE/IC/SAC
		<b>Total -</b>			<b>20</b>	

**Second semester**

Code	Title	L	T	P	Credit	Dept.
MA23101	Engineering Mathematics	3	1	0	4	MA
CH23101	Engineering Chemistry	3	0	2	4	CH
CE23102	Building Materials and Construction Techniques	2	0	2	3	CE
CE23103	Surveying and Field Practice	2	0	3	4	CE
CE23104	Environmental Science and Building Sanitation	1	0	2	2	CE
CE23105	Elements of Civil Engineering	2	0	0	2	CE
EAA23102	EAA -II Swachha Bharat Mission (SBM)	0	0	2	1	CE/IC/SAC
		<b>Total -</b>			<b>20</b>	

**Material Science and Engineering**  
**(5 Years, Bachelor and Master of Technology (Dual Degree))**

**1<sup>st</sup> year Course Structure**

**First Semester**

Code	Title	L	T	P	Credit	Dept.
PH18101	Engineering Physics	3	0	2	4	PH
MA18101	Engineering Mathematics – I	3	1	0	4	MA
EC18101	Elements of Electronics Engineering	3	1	0	4	EC
CS18101	Introduction to Computing	3	0	2	4	CS
HS18101	Communicative English	3	0	2	4	HSS
EA18101	EAA/Sports/Innovative Project/NCC/NSS	0	0	2	1	EC/IC/SAC
<b>Total -</b>					<b>21</b>	

**Second semester**

Code	Title	L	T	P	Credit	Dept.
PH28101	Kinetics & Thermodynamics	3	0	0	3	PH
CH28101	Engineering Chemistry	3	0	2	4	CH
EE28101	Elements of Electrical Engineering	3	0	2	4	EE
HS28101	Science, society and ethical values	2	1	0	3	HSS
MA28101	Engineering Mathematics –II	3	1	0	4	MA
EA28101	EAA-II/Swaksha Bharat Mission	0	0	2	1	EC/IC/SAC
<b>Total -</b>					<b>19</b>	

**Mathematics and Computing Technology**  
**(5 Years, Bachelor and Master of Technology (Dual Degree))**

**1<sup>st</sup> year Course Structure**

**First Semester**

Code	Title	L	T	P	C	Dept.	Contact Hours	Type
HS17101	Commutative English	3	0	2	4	HSS	5	Foundation
MA17101	Calculus	3	1	0	4	MA	4	Core
CS17101	Programming in C	3	0	2	4	CSE	5	Foundation
EC17101	Elements of Electronics Engineering	3	0	2	4	ECE	5	Foundation
PH17101	Engineering Physics	3	0	2	4	PH	5	Foundation
EAA17101	EAA-Sports/Innovative Project	0	0	3	1	MA/ SAC	3	EAA
					<b>Total -</b>		<b>21</b>	
							<b>27</b>	

**Second semester**

Code	Title	L	T	P	C	Dept.	Contact Hours	Type
MA27101	Differential Equations and Linear Algebra	3	1	0	4	MA	4	Core
MA27102	Complex Analysis and PDEs	3	1	0	4	MA	4	Core
EE27101	Elements of Electrical Engineering	3	0	2	4	EE	5	Foundation
HS27101	Science, Society and Ethical Values	3	0	0	3	HSS	3	Foundation
CH27101	Engineering Chemistry	3	0	2	4	CH	5	Foundation
EAA27101	EAA- Swachh Bharat Mission (SBM)	0	0	3	1	MA/SAC	3	EAA
					<b>Total -</b>		<b>20</b>	
							<b>27</b>	

## APPENDIX – VI

### Co-Ordination Committees for U.G. Studies

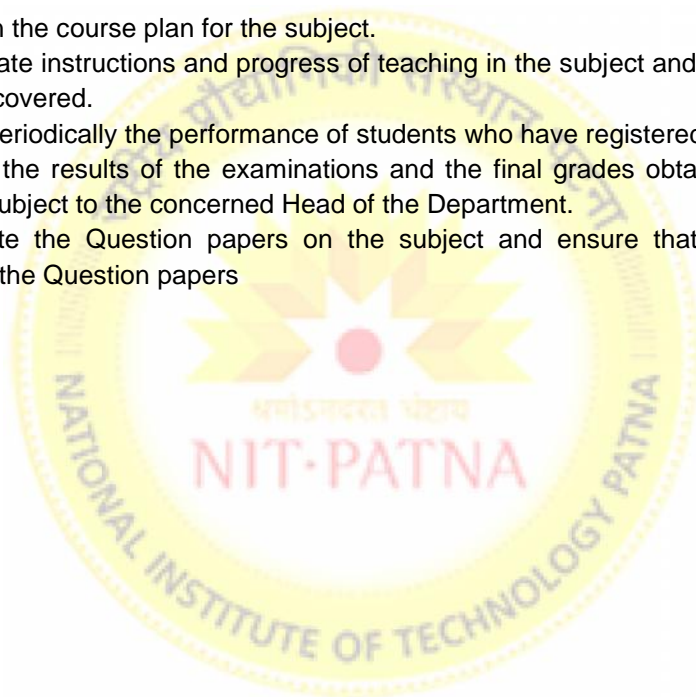
**Composition:** One Co-ordination Committee would be constituted for each subject taught by more than one teacher of one or more Department/ Centers. Each committee would consist of all the teachers who are involved with the teaching of the subject during the semester.

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.

**Tenure:** The semester in which the subject is being offered

**Functions:**

- (I) To lay down the course plan for the subject.
- (II) To co-ordinate instructions and progress of teaching in the subject and to ensure that the full syllabus is covered.
- (III) To review periodically the performance of students who have registered in the subject
- (IV) To forward the results of the examinations and the final grades obtained by each student taking the subject to the concerned Head of the Department.
- (V) To moderate the Question papers on the subject and ensure that the syllabus is well covered by the Question papers



## APPENDIX – VII

### Credit of a Subject in Semester & its Percentage Contribution

Credit in any Semester is based on Lecture, Tutorial and Practical (L – T – P) hours assigned for the subject.

Lecture/ Tutorial: One hour per week in a semester will be equivalent to one credit.

Practical: Three hours per week in a semester will be equivalent to one credit.

$$\text{Credit of a course offered in a Semester} = L + T + (P / 2)$$

Credit of any subject will be an integer number. If Credit calculated as stated above has any fractional part that needs to be rounded off to an integer number. In case the course credit is a fractional number greater than or equal to 0.5, then it should be rounded up to next higher integer. If fractional part is less than 0.5 then should be ignored.

### Details of Credit awarded as per L-T-P

L	0	0	0	0	0	0	0	0	0	1	2	2	3	3
T	0	0	0	0	0	0	0	0	1	1	0	1	0	1
P	1	2	3	4	6	15	30	60	3	0	0	0	0	0
Credits	1	1	2	2	3	8	15	30	3	2	2	3	3	4

L	3	3	3	3	3	3	3	3	3
T	0	0	0	1	1	1	2	2	2
P	1	2	3	1	2	3	1	2	3
Credits	4	4	5	5	5	6	6	6	7

Please refer to section 13.2 for details of weightage of different components for evaluation of course.

## APPENDIX – VIII

### Guidelines for Award of Letter Grades

(Amendment in UG/ PG program Curricula from session 2018-19)

As a measure of student's performance a **7-Scale Grading System** using the following letter grades and corresponding grade points per credit, shall be followed:

**TABLE-1: Letter Grades and corresponding grade points per credit**

Performance	Letter Grade	Grade Point Per Credit
Excellent	A+	10
Very good	A	9
Good	B	8
Fair	C	7
Average	D	6
Pass	P	5
Fail	F	0
Incomplete Course requirements	I	-
Debarred course due to Attendance	X	-

In general there is no rigid marks-to-grade linkage. Based on the several factors including the difficulty levels of the examinations, class tests, assignments, viva-voce, etc., that contributed to the final marks are to be considered by the **Instructor/ Department Committee** while converting marks into letter grades. Still adherence by **Instructor/ Department Committee** to these guidelines will help in evolving a common standard.

1. Award of Grades in Relative Grade System following guidelines may be considered.
  - (a) First Award **Incomplete (I)** and **Debarred (X)** Grade based on Rules and exclude all such students.
  - (b) The grades '**F**' (**Fail**) and '**A+**' (**Excellent**) are to be considered as bench mark grades.
  - (c) In the relative grading system, there is no set cut-off percentages of marks for award of any grade, hence the **exact cut-off marks for 'F' grade, and for any grade is to be decided by the Instructor/ Department Committee.**
  - (d) In a class/ course where percentage marks obtained by the students are normally distributed, then Conversion from Percentage on marks based on **Mean ( $\bar{x}$ )** and **Standard deviation ( )** works fairly well.
  - (e) However where marks obtained by the student is not uniform (**i.e. if there is high class average or low class average**) then Instructor requires to rework and modify the cut-off for each grade, such that distribution becomes uniform as per requirement of the relative grading system (Table-3). That has been discussed at section 6 onwards.
2. For classes where there is a reasonably uniform or has normal distribution of marks, the conversion from marks to grade may be done using the Table-2 given below.

**TABLE-2: Relative Grading Based on Normal distribution**

RANGE OF MARKS		GRADE ALLOTTED	
	Marks obtained	Average + 1.5	A+
<b>Average + 1.5</b>	> Marks obtained	Average + 0.9	A
<b>Average + 0.9</b>	> Marks obtained	Average +0.3	B
<b>Average + 0.3</b>	> Marks obtained	Average - 0.3	C
<b>Average - 0.3</b>	> Marks obtained	Average - 0.9	D
<b>Average - 0.9</b>	> Marks obtained	Average - 1.5	P
	Marks obtained	< Average - 1.5	F

Average ( $\bar{x}$ ) and Standard deviation ( ) should be calculated as per the following equations:

$$\text{Average of Marks} = (\bar{x}) = \frac{\sum_{i=1}^n X_i}{n}$$

$$\text{Standard deviation ( )} = \sqrt{\frac{\sum_{i=1}^n (X_i - \bar{x})^2}{n}}$$

where,

$X_i$  = The marks obtained by the  $i^{\text{th}}$  students and

$n$  = Total number of appeared student (population) for the particular course, excluding students who have been debarred (X) or have Incomplete (I) Grades

3. Normally, in a reasonably large class of students, distribution of grades is expected to follow as detailed under Table-3.

**TABLE-3: Preferred Distribution of Grades**

GRADE	Percentage of Appeared Student for a COURSE
<b>A+</b>	10%
<b>A</b>	<b>10 – 20 %</b>
<b>B, C, D</b>	<b>20 – 35% Each</b>
<b>P</b>	<b>10 – 25%</b>
<b>F</b>	<b>0 - 5 %</b>

In order to achieve the distribution of Grades for a reasonably large class of students as per in Table-3, for normal distribution Instructor/ Department Committee may use cut-off as referred in Table-2 for their reference. However, the Instructor/ Department Committee may decide the cut-off marks for each individual grades keeping the above Table-3, without even referring to the normal distribution i.e. the Table-2.

4. The Department Committee will decide and/ or moderate the award of grades (i.e. Cut-off marks for each Grade) for a course being taught in more than one section/ program to avoid wide disparity in performance across section(s)/ program(s) is observed or due to evaluation being done by different instructors or by a group of instructors.
5. In a small class/ section with number of registered students per course is not more than 25 (twenty-five), then Instructor will follow Absolute Grading system as detailed under Table-4



**TABLE-4: Award of Grades based on Absolute Marks obtained by students**

RANGE OF MARKS		GRADE ALLOTTED	
	Marks obtained	90	A+
<b>90 &gt;</b>	Marks obtained	80	A
<b>80 &gt;</b>	Marks obtained	70	B
<b>70 &gt;</b>	Marks obtained	60	C
<b>60 &gt;</b>	Marks obtained	50	D
<b>50 &gt;</b>	Marks obtained	33	P
	Marks obtained	< 33	F

6. If the Instructor/ Department Committee finds the course percentage of marks for the class(s)/ section(s)/ program(s) with high average or low class average, then Instructor/ Department Committee may decide to rework on award of grades using following guidelines:
  - (a) By modifying the Cut-off Marks for each grade as stated in Table-4, however the percentage of student in each grade follows the distribution as per Table-3.
  - (b) May decide to rework and modify the cut-off for each grade as per Table-2.
  - (c) May **alter the boundary of the cut-off marks by +/-5 marks** depending on the difficulty level of examinations, class tests, assignments, viva-voce, etc.
7. **Minor adjustment in marks may be done by the instructor, if a student is missing higher grade by fraction of marks** (subject to maximum one mark).
8. In the case where a student appears in the **Special End Semester examination** normally held at the end of a session, or attends **summer quarter** and then appears at Special End Semester examination, the **conversion from percentage of marks to grade would be done by applying the same norm of cut-off marks for each grade in the respective semesters/ program of the session.**

If a student has appeared in special exam for a backlog course which was not offered/ taught in current session, then Instructor may decide to refer cut-off marks from immediate previous sessions or may choose to award grade based on Table-4 for absolute grades.
9. In any of the above cases the instructor should announce the grading method (absolute or relative) and evaluation pattern for internal assessment, Mid Sem and End Sem exam(s) at the beginning of the respective courses and Semester. In case of more than one instructor(s), Course coordinator will supervise and maintain uniformity.
10. In case of relative grading the **cut-off marks for each grade for each individual course should be completely confidential (must not be revealed to anyone)** except Department Committee. The decision of the Departmental Committee shall be final.
11. The departmental Committee will approve the cut-off marks for each Grade (Relative/ Absolute Grading System), and average marks ( $\bar{x}$ ) and Standard deviation ( ) for all courses.
12. The Course Instructor is required to submit hardcopy of Marks awarded for each component of internal and end semester exam evaluation, Percentage marks obtained (PMO), Grade awarded, and details of Average mark ( $\bar{x}$ ), Standard Deviation ( ), Cut-off marks for each grade to the Examination Section and Head of the department for record and future reference.
13. Respective Course Instructor is required to upload the marks and Grade(s) and other data/ information as required in Academic MIS of the Institute, for publication of result.

14. The calculation of **Semester Grade Point Average (SGPA)** for a set of 'i' subjects at end of each semester and **Cumulative Grade Point Average (CGPA)** for a set of 'p' subjects offered till last semester will be calculated as detailed below:

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

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

Where,

n = number of course/ subjects registered for the semester,

p = number of course/ subjects registered and passed till last semester

$c_i$  = number of Credits allotted to a particular subject 'i' in the set

$g_i$  = grade – points carried by the letter corresponding to the grade awarded to the student in that subject 'i'

**SGPA and CGPA will be rounded off to the second place of decimal and recorded for each student.**

15. The students shall be provided facility to access on-line Grade Card with Course Name, Course Credit, and L-T-P, Grade for each registered course, and SGPA and CGPA for End Semester examination of the semester/ session. However, after completion of course/ program every student shall be provided following documents in hard copy:
- Transcript of the students with Grades and Grade point for each course registered in any semester, SGPA and CGPA.
  - Provisional Certificate after graduation in the format outlined for the purpose.
16. The academic evaluation process a student may have highest possible CGPA as 10 (ten) in the system. The Institute **does not award any Class or Division**. Further there is **no system/ formula for conversion from Letter grades to Absolute percentage of marks**.
17. **Conversion of CGPA into percentage Marks:** In case of a specific query by students/ employers regarding conversion of CGPA into percentage marks, the following formula will be adopted for notional conversion of CGPA into percentage marks. **Formula: % Marks = CGPA\*10.**

## Grade Card/ Transcript and Academic Status:

- Cumulative Grade Point Average (CGPA) will be calculated for only such students who have passed all courses till previous semester.
- The academic status shall be also recorded on the Grade Card issued to the student. The logic table for determining Academic status is placed in Table Below:

S. No.	Category	Details of grades and sub-category
1.	PASS	Grade awarded for All Courses are between A+ to P and Total Credit Earned = Total credit offered during the semester for the program
2.	BACK LOG	Grade awarded is "F". Such student may register as a backlog course in a regular registration session or appeared in summer special exam.
3.	INCOMPLETE	Grade awarded is "I", if (i) Student has incomplete evaluation as he/ she could not appear for course(s) at End Semester Examination. (ii) Adopting UNFAIR practice at Mid/ End Semester examination Such students may appear at Special Examination to be held during summer vacation.
4.	DEBARRED and REPEAT	Grade awarded for Course(s) is "X", as student have been debarred due to following reasons(s): i) Shortage of attendance i.e. attendance is less than required for a course/ program and/ or ii) Disciplinary action recommended by Disciplinary Committee. The student under category (i) is required to Re-register for the Course(s) with next batch or next semester as per provisions of the curricula for the program. However, for students under (ii) registration shall be allowed after completion of the punishment period as a Backlog course.

- The Additional Transcript / Duplicate Grade Card will be issued on payment of extra charge fixed by the competent authority.
- Request for issue of Duplicate copy of any document such as Degree, Migration, certificate and Provisional Degree must carry Affidavit and Fee fixed for it.
- The grade card/ transcript shall be issued by the signature of DR(Exam) and Associate Dean (Exam) or as decided by Authority.

## APPENDIX – IX

### Rules Relating to Summer Quarters

#### 1. Introduction

- 1.1 Final and Pre-final undergraduate students who have got X grade in subject(s) in any semester are eligible for summer Quarter.
- 1.2 **Conduct of the summer quarter** in any course(s) by the department (offering such course) **is not mandatory**.
- 1.3 If a registered student for summer quarter and is **declared debarred due shortage of attendance** or due to any reason then he/ she will have to **re-register for that course(s) in corresponding semester** during **next session**.

#### 2. Duration

- 2.1 The duration of the Summer Quarter shall be four weeks. The exact dates for holding the Summer Quarter for a particular session shall be decided by the Senate every year while finalizing the Academic Calendar.
- 2.2 The attendance requirement for the Summer Quarter shall be the same as for a regular semester. A student who does not satisfy the norms will not be allowed to appear at the examination.

#### 3. Registration

- 3.1 All students intending to join a Summer Quarter must register themselves for the subjects concerned on the day fixed for the purpose. No late registration shall be permitted on any ground.
- 3.2 A prevalent Summer Quarter registration fee, as decided by the Institute from time to time shall have to be paid along with the application in a prescribed form.
- 3.3 Registration of students for the Summer Quarter in a subject shall be done by the Faculty Adviser in the Department concerned under the supervision of the Head of the Department.

#### 4. Assessment

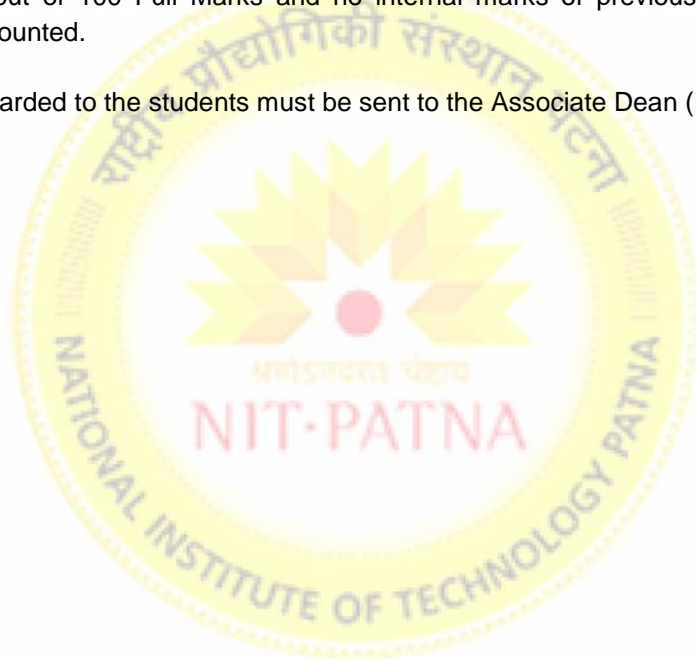
The teacher offering a particular subject during the Summer Quarter shall

- 4.1 Take care of all aspects of the theory component of the subject, viz, lectures, tutorials, assignments etc.
- 4.2 Conduct all class tests, mid - semester examination, end-semester examination viva-voce etc. the end - semester examinations may however be centrally arranged.
- 4.3 Compute the grade as per the grading system.
- 4.4 The grades -awarded to the registered students must be sent to the Associate Dean (Examination) within 3 days from the date the examination was held.

## **APPENDIX – X**

### **Rules Regarding Special Examination**

1. A student will be eligible to appear in the special examination in a course (s) if he/she had registered those course(s) in any previous semester/session and obtained the grade 'F' or 'I'.
2. Intending students must complete the registration process for Special Examination.
3. The special examinations shall be held on such dates as laid down in the Academic Calendar for the year or as notified separately.
4. The student appearing at Special examination for any course(s) having "F" or "I" Grade, their evaluation will be out of 100 Full Marks and no internal marks of previous examinations in that course(s) shall be counted.
5. The final grades awarded to the students must be sent to the Associate Dean (Exam).



## Appendix – XI

### Refund Rules of Tuition Fee and Other Fee Deposited By Any Student after Taking Admission in the Institution and Cancellation/ Withdrawal Thereafter

- Any student may request for withdraw from the Institute after admission and joining the program. But in such all cases, the student is required to submit application to the Dean (Academic) through the HOD with counter signature of the Parent/ Legal Guardian.  
No request for cancellation of admission and/ or permission to withdraw from a program shall be entertained unless application is countersigned by Parent/ Legal Guardian with justifications.
- Refund of fee deposited at admission agency (for example JoSAA/CSAB) shall be allowed only if amount has been transferred to the Institute as per rules of the Institute only.
- The application of refund of fee etc. shall be processed only after admission has been closed for the session.
- Refund Rules of tuition fee and other fee deposited by any candidate/ student after taking Admission in the allotted Institution and cancellation/ Withdrawal thereafter from the institution are processed as per following categories:

S. No.	Category of Withdrawal/ cancellation of Admission	Refund of Initial Fee deposited/ Admission fee/ Tuition Fee/ Development Charges/ Registration charges, Examination fee, Caution money etc.
1.	<b><u>During counseling and before admission in the Institute:</u></b>	Refund as per Admission Agency rules (i.e. JoSAA/CSAB)
2.	<b><u>After Admission in the Institute:</u></b> Students withdraw after reporting/ taking admission at the institution and/ or leave the institution after registration to a program. In such case vacant seat due to cancellation/ withdrawal or lapsed/ vacant seats in different branches will remain vacant/ cannot be filled up.	No refund of fee will be allowed, except examination fee and Caution money if deposited by the student. The institution will claim for transfer of initial fee deposited by the student at the JoSAA/CSAB as seat will remain vacant for next 4 yrs for B. Tech and 5 yrs for B. Arch program.

## Appendix – XII

### Examination Unfair Means and Malpractice Cases (UMC) During Examinations

1. The provisions of punishment for various reported cases of Unfair-means Cases (UMC) in Examination during End semester/ Special examination is as given below:

Category	Nature of offence	Approved Punishment
1.	Possession of piece of paper, which is connected with the subject matter but not utilized.	Cancellation of the Examination of the paper and Award with Grade 'F' in that paper
2.	Utilization of piece of paper / notes/ books chits etc. which is connected with the subject matter of the Examination	
3.	Substituting replacing, changing or adding pages in the answer book supplied to the candidate, taking answer book outside the examination hall, tampering with material evidence, threatening the persons connected with the examination.	Cancellation of current Examination and debarred from any Examination in the next one academic semester. After next academic semester the student has to get registration in the same semester and attend classes (i.e. re- admission).
4.1	<b>Impersonation:</b> (a) If the Impersonator is identified to be a student of the Institution,	(a) His/ Her admission be cancelled and He/ She will be expelled from the Institute. He/ She will be also handed over to police/ Magistrate for action under law.
	(b) If the Impersonator is identified to be other than a student of the Institution	(b) He/ She shall be handed over to the police/ magistrate for action under the law.
	(c) In case of both 4.1 (a) & (b) above:- In respect of the student for whom the impersonator was appearing	(c) His/ Her admission shall be cancelled and He/ She will be expelled from the Institute. He/ She will be handed over to police/ Magistrate for action under law. However if the student has informed regarding absence from examination in advance with valid reasons and supporting documents to the Controller of Examination/ D. R. (Exam), then his/ her current examination shall be cancelled after enquiry and action as provisions under the law shall be initiated after enquiry & confirmation.
4.2	Disruption of examination by slogans or Gherao, leading to cancellation of examination.	Cancellation of current Examination and debarred from any Examination in the next one academic semester. After next academic semester the student has to get registration in the same semester and attend classes (i.e. re- admission).
4.3	Snatching or tearing of answer book of other examinees	Cancellation of current Examination
4.4	Threats or assault or use of force against persons connected with examination	Cancellation of current Examination and debar from any Examination in the next <b>one</b> academic semester i.e. after <b>one</b> academic semester, the student(s) has/ have to get registered in the same semester and attend classes (i.e. re-admission)

Category	Nature of offence	Approved Punishment
4.5	Exhibiting Gross indiscipline	Disciplinary action and legal action may be initiated considering the seriousness of the offence.
4.6	Illegal activities by examinees.	Any or all of the aforesaid punishment, considering the seriousness of the offence. The case may be referred to Institute Disciplinary Committee.

2. A student having punished under UMC then shall not be eligible for award of any Institute medal or any kind of award or character certificate in future.

The provision of punishment for various reported cases of Unfair means Cases (UMC) in Examination during Mid Semester examination is as given below:

Category	Nature of offence	Approved Punishment
1.	Possession of piece of paper which is connected with the subject matter but not utilized.	Zero mark will be awarded in that paper. In End Semester exam, if eligible student will be evaluated out of 90 Marks in that paper
2	Utilization of piece of paper/ note books/ chits etc. which is concerned with the subject matter and any act of indiscipline	Zero mark will be awarded in that paper.
3.	Substituting replacing, changing or adding pages in the answer book supplied to the candidate, taking answer book outside the examination hall, tampering with material evidence, threatening the persons connected with the examination.	Cancellation of current Examination and debarred from any Examination in the next one academic semester. After next academic semester the student has to get registration in the same semester and attend classes (i.e. re- admission).

**Note:** Possession of Mobile or any other electronic gadget having capability of mass storage and programming during Mid or End Semester examination be considered as equivalent to Possession of piece of paper connected/ unconnected with subject matter of the examination.



## Appendix – XIII

### Constitution of Board of Studies (BOS)

1. Head of the Department	Chairman Ex-officio
2. Regular faculty members of the Department	Member
3. One Regular Faculty from the Sister Department (to be nominated by the Director)	Member
4. Two External Expert Nominated by Senate Chairman	Member
5. Teacher from other Departments for specialized subject (to be invited by HoD)	Invited Member
6. PI (T&P)	Invited Member
7. One Expert from Industry / Alumni	Member
8. One faculty from the Department (to be nominated by HoD)	Convener



## Appendix – XIV

### Course Code Format for Theory Subject

Subject offered by Department:	Semester:	Subject offered for Department	Subject Code Sr. No.
<b>CS1801: CSE deptt. offers a theory subject for first semester of Mechanical Engineering Deptt. having subject code with S No 01.</b>			
Architecture: AR	1 <sup>st</sup> Sem: 1	Architecture: 1	Range 01 to 99
Chemistry: CH	2nd Sem: 2	Chemistry: 2	
Civil Engg: CE	3rd Sem: 3	Civil Engg: 3	
Computer Sc Engg: CS	4th sem: 4	Computer Sc Engg: 4	
Eletro & Comm Engg: EC	5th Sem: 5	Eletro & Comm Engg: 5	
Electrical Engg: EE	6th Sem: 6	Electrical Engg: 6	
Humanities: HS	7th Sem: 7	Mathematics: 7	
Mathematics: MA	8th Sem: 8	Mechanical Engg: 8	
Mechanical Engg: ME	9th Sem: 9	Physics: 9	
Physics: PH	10th Sem: 10		

### Course Code Format for LAB Subject

Subject offered by Department	Semester	Subject offered for Department	Subject Code Sr. No.
<b>CSL1801: CSE deptt. offers a laboratory subject for first semester of Mechanical Engineering Deptt. having subject code with S No 01.</b>			
Architecture: ARL	1 <sup>st</sup> Sem: 1	Architecture: 1	Range 01 to 99
Chemistry: CHL	2nd Sem: 2	Chemistry: 2	
Civil Engg: CEL	3rd Sem: 3	Civil Engg: 3	
Computer Sc Engg: CSL	4th sem: 4	Computer Sc Engg: 4	
Eletro & Comm Engg: ECL	5th Sem: 5	Eletro & Comm Engg: 5	
Electrical Engg: EEL	6th Sem: 6	Electrical Engg: 6	
Humanities: HSL	7th Sem: 7	Mathematics: 7	
Mathematics: MAL	8th Sem: 8	Mechanical Engg: 8	
Mechanical Engg: MEL	9th Sem: 9	Physics: 9	
Physics: PHL	10th Sem: 10		

## Appendix – XV

### Semester Grade card

Name : XX XX Enrolment No.: XX XX				Roll No. - XX XX		
<b>B.Tech-CE , Four Years Full Time Program, Department of Civil Engineering</b>						
Course Code	Course Title	L-T-P	Credit	Grade	Number of Attempt	SGPA / CGPA
<b>Semester – 1</b>			<b>July_Dec_2016</b>			
1PH102	Engineering Physics Lab	0-0-3	1	B	1	
1PH101	Engineering Physics	3-1-0	4	D	1	
1EE101	Elements Of Electrical Engg.	3-1-0	4	A	1	
1CS102	Computing Lab	0-0-3	1	A+	1	
1CS101	Introduction to Computing	2-1-0	3	I	1	
<b>SGPA – X.XX</b>		<b>CGPA – X.XX</b>		<b>XX</b>	<b>BACKLOG</b>	

Name : XX XX Enrolment No.: XX XX				Roll No. - XX XX		
<b>B.Tech-CE , Four Years Full Time Program, Department of Civil Engineering</b>						
Course Code	Course Title	L-T-P	Credit	Grade	Number of Attempt	SGPA / CGPA
<b>Semester – 2</b>			<b>Jan_June_2017</b>			
2EC102	Elements Of Electronics Engg Lab	0-0-3	1	X	1	
2ME101	Engineering Graphics	1-0-3	2	B	1	
2MA102	Engineering Mathematics-II	3-1-0	4	P	1	
2CH101	Chemical Science	3-0-0	3	A	1	
2EC101	Elements Of Electronics Engg	3-1-0	4	A	1	
<b>SGPA – X.XX</b>		<b>CGPA – X.XX</b>		<b>23</b>	<b>BACKLOG</b>	

<b>Backlog Paper</b>			<b>SMR_JULY_2017</b>			
Course Code	Course Title	L-T-P	Credit	Grade	Number of Attempt	SGPA / CGPA
1CS101	Introduction to Computing	2-1-0	3	F	2	Backlog
2EC102	Elements Of Electronics Engg. Lab	0-0-3	1	I	2	Backlog

Name : XX XX Enrolment No.: XX XX				Roll No. - XX XX		
<b>B.Tech-CE , Four Years Full Time Program, Department of Civil Engineering</b>						
Course Code	Course Title	L-T-P	Credit	Grade	Number of Attempt	SGPA / CGPA
<b>Semester – 3</b>			<b>July Dec 2017</b>			
3MA104	Tools for Applied Mathematics:	3-0-0	3	A	1	
3CE105	Fluid Mechanics & Hydraulics	3-1-0	4	B	1	
3CE109	Surveying Lab	0-0-3	1	A+	1	
3CE106	Fluid Mechanics & Hydraulics lab	0-0-3	1	A+	1	
1PH104	Material Science and Technology - I	3-0-0	3	C	1	
<b>SGPA – X.XX</b>		<b>CGPA – X.XX</b>		<b>XX</b>	<b>PASS</b>	<b>X.XX</b>

<b>Backlog Paper</b>						
Course Code	Course Title	L-T-P	Credit	Grade	Number of Attempt	SGPA / CGPA
1CS101	Introduction to Computing	2-1-0	3	A+	3	Dec-2017

Name : XX XX Enrolment No.: XX XX				Roll No. - XX XX		
<b>B.Tech-CE , Four Years Full Time Program, Department of Civil Engineering</b>						
Course Code	Course Title	L-T-P	Credit	Grade	Number of Attempt	SGPA / CGPA
<b>Semester – 4</b>			<b>Jan June 2018</b>			
4CE110	Design of Concrete Structures	3-1-0	4	A	1	
4CE112	Geotechnical Engineering -I	3-1-0	4	C	1	
4CE114	Environmental Engineering -I	3-1-0	4	C	1	
4MA108	Numerical Methods for Engineers	3-0-0	3	A+	1	
4CE111	Cement Concrete Lab	0-0-3	1	A	1	
<b>SGPA – X.XX</b>		<b>CGPA – X.XX</b>		<b>21</b>	<b>PASS</b>	

<b>Backlog Paper</b>						
Course Code	Course Title	L-T-P	Credit	Grade	Number of Attempt	SGPA / CGPA
2EC102	Elements Of Electronics Engg Lab	0-0-3	1	A	3	



राष्ट्रीय प्रौद्योगिकी संस्थान पटना  
**NATIONAL INSTITUTE OF TECHNOLOGY PATNA**  
 (An Institution under Ministry of HRD, Govt. of India)  
 ASHOK RAJPATH, PATNA, BIHAR – 800 005

No GXXXXXXX

**Grade Card**

Processed On: XX-XX-XXXX

Publication/Passing Date: XX/XX/XXX

Print Date: XX-XX-XXX

<b>Name : XXXXXXXXXXXXXXXXXXXX</b>	<b>Roll No. : XXXXXX</b>
<b>Enrolment No. : XXXXXX</b>	
<b>B.Tech-XXX , Four Years Full Time Program, Department of XXXXXXXXXXXXXXXXXXXXXXXX</b>	

Course Code	Course Title	L-T-P	Credit	Grade	Number of Attempt	SGPA / CGPA
SEMESTER - 1		JUL-DEC_2015				
COURSE CODE 1	Course Title 1	3-1-0	4	A	1	
COURSE CODE 2	Course Title 2	1-1-0	2	A	1	
COURSE CODE 3	Course Title 3	0-1-3	2	B	1	
COURSE CODE 4	Course Title 4	0-0-3	1	B	2	
COURSE CODE 5	Course Title 5	0-0-3	1	A+	1	
COURSE CODE 6	Course Title 6	3-1-0	4	B	1	
COURSE CODE 7	Course Title 7	0-0-3	1	A	1	
COURSE CODE 8	Course Title 8	3-0-0	3	B	3	
COURSE CODE 9	Course Title 9	3-1-0	4	B	1	
Semester - 1			XX	Pass		X.XX
SEMESTER - 2		JAN-JUN_2016				
Semester - 2			XX	Pass		X.XX
SEMESTER - 3		JUL-DEC_2016				
Semester - 3			XX	Pass		X.XX
SEMESTER - 4		JAN-JUN_2017				
Semester - 4			XX	Pass		X.XX
SEMESTER - 5		SMR-JUL_2019				
Semester - 5			XX			X.XX
SEMESTER - 6		JAN-JUN_2020				
Semester - 6			XX			
SEMESTER - 7		JUL-DEC_2019				
Semester - 7			XX			X.X
SEMESTER - 8		JAN-JUN_2019				

Curricula for B. Tech, B. Arch and Dual Degree Programme (B.Tech + M.Tech) 2021-2022 and onwards

Semester - 8		XX		X.XX		
Academic Status of Roll No. XXXXXXXX for XX Courses		XXX	<b>Pass</b>	XXX		

Rank:... out of batch size.....

(Conversion CGPA /SGPA to % of Marks = CGPA/SGPAX10)





**राष्ट्रीय प्रौद्योगिकी संस्थान पटना**  
**NATIONAL INSTITUTE OF TECHNOLOGY PATNA**  
 (An institution under Ministry of Education, Govt. of India)  
 ASHOK RAJPATH, PATNA, BIHAR – 800 005

No: TXXXXXXXXX

Date: XX-XXX-XXXX

Processed On: XX-XXX-XXXX

Transcript : B.Tech-XXX (4 Years) Full Time Program, Department of XXXXXXXXXXXXXXXXXXXX

Name of the Student: XXXXXXXXXXXXXXXXXXXX		Roll No: XXXXXXXX		Enrollment No: XXXXXX				
Course Code	Title	L-T-P	Credit	Grade	Grade Point	Earned Credit	Number of Attempt	SGPA / CGPA
SEMESTER - 1 JUL-DEC_2015								
Course Code 1	Course Title 1	3-1-0	4	A	36	4	1	
Course Code 1	Course Title 2	1-1-0	2	A	18	2	1	
Course Code 1	Course Title 3	0-1-3	2	B	16	2	2	
Course Code 1	Course Title 8	3-0-0	3	B	24	3	3	
Course Code 1	Course Title 9	3-1-0	4	B	32	4	1	
<b>Summary for Year / Semester = 1 ( 9 Courses )</b>			XX	Pass	XXX	XX		X.XX
SEMESTER - 2 JAN-JUN_2016								
<b>Summary for Year / Semester = 2 ( X Courses )</b>			XX	Pass	XXX		XX	X.XX
SEMESTER - 3 JUL-DEC_2016								
<b>Summary for Year / Semester = 3 ( X Courses )</b>			XX	Pass	XXX		XX	X.XX
SEMESTER - 4 JUL-DEC_2015								
<b>Summary for Year / Semester = 4 ( X Courses )</b>			XX	Pass	XXX	XX		X.XX
SEMESTER - 5 JAN-JUN_2016								
<b>Summary for Year / Semester = 5 ( X Courses )</b>			XX	Pass	XXX		XX	X.XX
SEMESTER - 6 JUL-DEC_2016								
<b>Summary for Year / Semester = 6 ( X Courses )</b>			XX	Pass	XXX		XX	X.XX
SEMESTER - 7 JUL-DEC_2015								
<b>Summary for Year / Semester = 7 ( X Courses )</b>			XX	Pass	XXX	XX		X.XX
SEMESTER - 8 JAN-JUN_2016								
<b>Summary for Year / Semester = 8 ( X Courses )</b>			XX	Pass	XXX		XX	X.XX
<b>Summary for Roll No. XXXXXXXX ( XX Courses )</b>			XXX	Pass	XXXX		XXX	X.XX

(Conversion of CGPA/SGPA to % of Marks = CGPA/SGPA X 10)

DR (Exam)

PI (Exam)

## Appendix – XV

### Dissertation Submission: Format Guidelines

#### Arrangement of Certificates and Text in Thesis

1. Cover Page (*BLACK color*)
2. Inside Cover Page (Identical to Cover Page)
3. Certificate from Supervisor(s)
4. Student's Declaration & copy right
5. Acknowledgments
6. Abstract
7. Contents
8. List of Figures
9. List of Tables
10. Abbreviations (if any)
11. Chapters





(Project Report bound copy in Black color)

# INTERNATIONAL RELATIONS CENTRE AT KATHMANDU

*(20 Times new roman)*

## A Project Report

*(16 times new roman)*

Submitted in Partial Fulfillment of the Requirements for the  
Award of the Degree of

## Bachelor of Technology *(20 TNR)*

*In*

## Computer Science & Engineering *(14 TNR)*

*Submitted by*

**Anand Gopal** *(14 TNR)*

Roll No.-506/08, Enrolment No. 12345 *(12 TNR)*

*Under the supervision of*

**Dr. Ram Mohan Roy**  
Professor

**Dr. Shyam Prasad** *(12 TNR)*  
Associate Professor *(10 TNR)*



**Department of Computer Science & Engineering** *(14 TNR)*  
**NATIONAL INSTITUTE OF TECHNOLOGY PATNA** *(14 TNR)*  
PATNA- 800 005

**JUNE YYYY (YYYY-YY)**

## DECLARATION AND COPYRIGHT TRASFER

*(to be signed by the candidate)*

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Date: .....

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# Project Report Presentation Information

## 1. Contents of the Dissertation

Title, Certification, Declaration and copyright, Acknowledgment, Dedication, Abstract, Table of Content, List of Figures, List of Tables, Abbreviations

<b>CHAPTER 1</b>	Introduction
<b>CHAPTER 2</b>	Background & Literature Review
<b>CHAPTER 3</b>	Problem Definition
<b>CHAPTER 4</b>	Proposed Solution
<b>CHAPTER 5</b>	Discussion of Results
<b>CHAPTER 6</b>	Conclusion and Future Work
<b>REFERENCE</b>	Use strictly the following reference writing method.
<b>APPENDICES</b>	Summary data, intermediate results and other important information may be put under Appendices. (Standard Format Like IEEE (CSE, ECE, EE), ASME (ME), ASCE (CE, Arch))

## 2. Font and Spacing

Title: Bold, Arial, 14 size and Centered  
Subtitles: Bold, Arial, 12 size and left justified  
Spacing: Spacing between text lines: 1.5, Arial, 12 sizes,  
Leave one space between paragraphs, subtitle and the text or between Title and sub title.

## 3. Paper Margins

Left margin : 4.0 cm  
Right margin : 2.5 cm  
Top margin : 4.0 cm  
Bottom margin : 2.5 cm

## 4. Printing

The entire thesis shall be printed only on one side of the paper.

## 5. Draft Submission

Two-Three loose bounded copies each for the examination committee shall be submitted on the set deadline.

## 6. Final submission

- **Hard bound copy of dissertation (for Supervisor(s), Departmental Library, Institute Library, Student(s))** after incorporating modifications/suggestions of the examiner.
- **Soft Copy in CD**



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