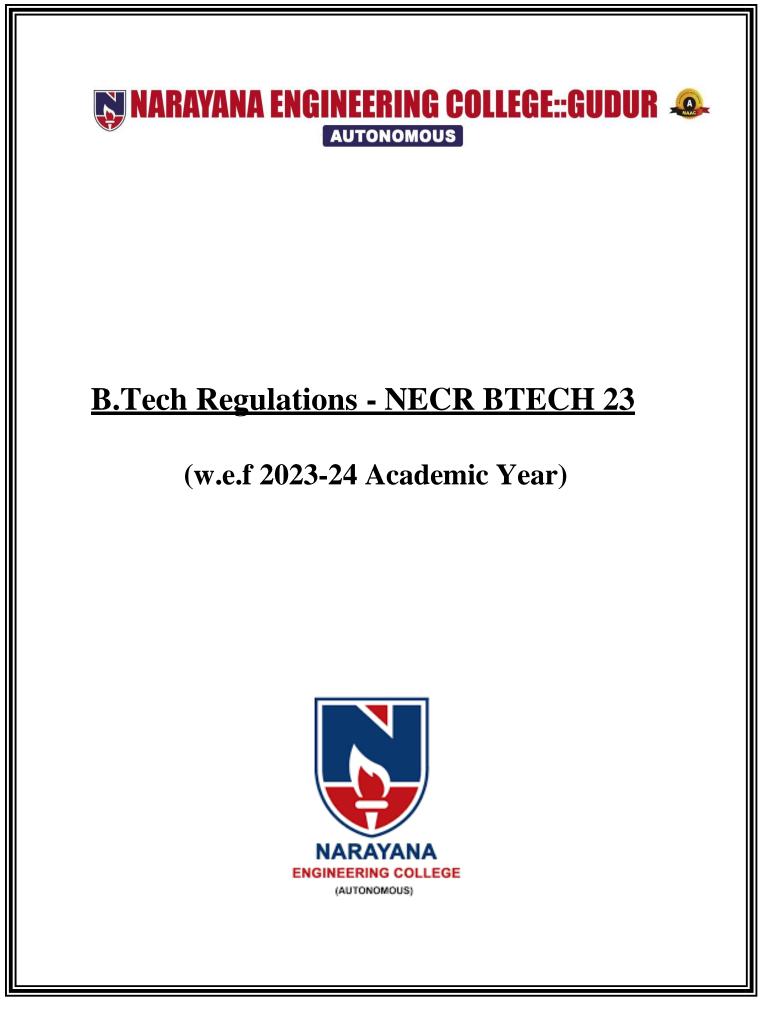# B.Tech

Regulations

(2023-24 academic year)

(NECR B.Tech 23)

NARAYANA
ENGINEERING COLLEGE

B.Tech Regulations - NECR BTECH 23

(w.e.f 2023-24 Academic Year)

NARAYANA ENGINEERING COLLEGE::GUDUR
AUTONOMOUS

B.Tech Regulations - NECR BTECH 23
(W.e.f : 2023-24 Academic Year)

1. PREAMBLE

1.1. VISION, MISSION, QUALITY POLICY AND OBJECTIVES

VISION

To be one of the premier institutions of the country for professional education in producing technocrats with competent skills, innovative ideas and Ethics to serve the nation.

MISSION

- To Provide an environment most conducive to learning with State-of-the art infrastructure, well equipped laboratories and research facilities to impart high quality technical education.

- To emphasize on innovative ideas and creative thinking and prepare them to meet the growing challenges of the industry.

- To inculcate the leadership qualities, multi-disciplinary approach, ethics and lifelong learning in graduation to serve the diverse societal needs of our nation.

Quality Policy

We at Narayana Engineering College, Gudur aspire to establish a system of Quality Assurance, which would contribute to the growth of technical education, upholding the highest ethical and professional standards and develop the Institute as a Centre of Excellence

Objectives

a. Providing world class education in Engineering, Technology, Applied Sciences and Management studies.

b.   Keeping pace with the ever changing technological scenario and help the students to gain proper direction to emerge as competent professionals, fully aware of their commitment to the society and the nation.

c.   To inculcate a flair for Research, Development and Entrepreneurship.

d.   To fulfill industry human resource requirement

1.2. SHORT TITLE AND COMMENCEMENT

The regulations listed under this Section are common for all Engineering Degree Undergraduate Programmes offered by Narayana Engineering College (NEC),Gudur, Autonomous with effect from the academic year 2023-24 and they are called NECR B.Tech 23.

The regulations here under are subject to amendments as may be made by the Academic Council (AC) of the college from time to time, keeping the recommendations of the Board of Studies (BOS) in view. Any or all such amendments shall be effective from such date and to such batches of students including those already undergoing the programme, as may be decided by the Academic Council.

1.3. PRELIMINARY DEFINITIONS AND NOMENCLATURES

Autonomous Institute: Means an institute designated as Autonomous by University Grants Commission (UGC), New Delhi in concurrence with affiliating University (Jawaharlal Nehru Technological University, Ananthapuramu) and State Government.

Academic Autonomy: Autonomy granted by the University Grants Commission (UGC) and Jawaharlal Nehru Technological University Anantapuramu (JNTUA), to Narayana Engineering College,Gudur in all aspects of conducting its academic programmes for promoting excellence.

Academic Programme: Academic Programme means any combination of courses and/or requirements leading to award of a degree.

Academic Council: The Academic Council is the highest academic body of the institute and is responsible for the maintenance of standards of instruction, education and examination within the institute. Academic Council is an authority as per UGC regulations and it has the right to take decisions on all academic matters.

Academic Year: Two consecutive (one odd + one even) semesters constitute one academic year.

Backlog Course: A course is considered to be a backlog course if the student has not cleared and due to which obtained a failure grade (F) in that course.

Board of Studies (BOS): BOS is an authority as defined in UGC regulations, constituted by Head of the Organization for each of the departments separately. They are responsible for curriculum design and up dation in respect of all the programmes offered by a department.

Choice Based Credit System(*CBCS*) - Providing choice for students to select courses from the prescribed course categories (core, elective, skill

courses) in the preferred semester complying prerequisites and based on their learning aptitudes.

College: Narayana Engineering College, Gudur (NEC) Autonomous.

Commission: University Grants Commission (UGC).

Compulsory course: Course required to be undertaken for the award of the degree as per the programme.

Continuous Internal Evaluation (CIE): Means evaluation of students' achievement in the learning process. CIE shall be done by the Course Instructor and includes tests, assignments, problem solving, group discussion, quiz, mini-project and seminar throughout the Semester, with weightage for the different components being fixed at the institute level.

Core: The courses that are essential constituents of each engineering discipline are categorized as professional core/programme core courses for that discipline.

Council: All India Council for Technical Education (AICTE)

Course: A unit of teaching, which encompasses various topics, that typically lasts one semester, is led by one or more faculty and has a fixed set of registered students. It is either theory or practical identified by its course title and code number.

Course Outcomes: The essential skills that need to be acquired by every student through a course.

Credit: A unit by which the course work is measured. A credit is a unit that gives weight to the value, level or time requirements of an academic

course. The number of 'Contact Hours' in a week of a particular course determines its credit value.

Credit point: It is the product of grade point and number of credits for a course.

Cumulative Grade Point Average (CGPA): It is a measure of overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.

Curriculum: Curriculum incorporates the planned interaction of students with instructional content, materials, resources, and processes for evaluating the attainment of Programme Educational Objectives

Degree: An academic degree conferred by the university upon those who complete the undergraduate curriculum.

Department: An academic entity that conducts relevant curricular and co-curricular activities, involving both teaching and non-teaching staff, and other resources in the process of study for a degree.

Detention in a Course: Student who does not obtain minimum prescribed attendance in a course shall be detained in that particular course.

Department Academic Committee (DAC): The Department Academic Committee consists of HOD and four senior faculty members from the department to review the academic activities of the department.

Evaluation: Evaluation is the process of judging the academic performance of the student in her/his courses. It is done through a combination of continuous internal assessment and semester end examinations.

Grade: It is an index of the performance of the students in a said course. Grades are indicated by alphabets.

Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale.

Honors: An Honors degree typically refers to a higher level of academic achievement at an undergraduate level.

Institute: Means Narayana Engineering College: Gudur unless indicated otherwise by the context.

Lateral entry Students: Students enrolled into the four year programme in the second year.

Massive Open Online Courses (MOOC): MOOC courses inculcate the habit of self- learning.

Minor: Minor are coherent sequences of courses which may be taken in addition to the courses required for the B.Tech degree.

Pre-requisite: A specific course or subject, the knowledge of which is required to complete before student can register in another course at the next grade level.

Programme: Means, UG degree programme: Bachelor of Technology (B.Tech); PG degree programme: Master of Technology (M.Tech) /

Master of Business Administration (MBA)./Master of Computer Applications (MCA).

Programme Educational Objectives: The broad career, professional and personal goals that every student will achieve through a strategic and sequential action plan.

Regulations: The regulations, common to all B.Tech programmes offered by Institute, are designated as – NECG Regulations – NECR B.Tech 23 and are binding on all the stakeholders.

Regular Students: Students enrolled into the four year programme in the first year.

Semester: It is a period of study consisting of 21 weeks of academic work equivalent to normally 90 working days. Odd semester commences usually in July and even semester in December of every year.

Semester end examination (SEE): Means examination conducted by the institute covering the entire Course Syllabus at the end of the semester.

Semester Grade Point Average (SGPA): It is a measure of performance of work done in a semester. It is ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester. It shall be expressed up to two decimal places

University: Means Jawaharlal Nehru Technological University, Ananthapuramu, (JNTUA) is an affiliating University.

1.4 Choice Based Credit System:

The Choice Based Credit System (CBCS) system is making the learning system "Student-Centric". CBCS will allow students to choose inter-disciplinary, intra- disciplinary courses, skill oriented papers (even from other disciplines according to their learning needs, interests and attitude) and provide more flexibility for students in learning.

CBCS enables a student to obtain a degree by accumulating the required number of credits prescribed for that degree. Under the CBCS, the requirement for awarding a degree is prescribed in terms of number of credits to be completed by the students. The number of credits earned by the student reflects the knowledge or skill acquired by him / her. Each course is assigned with a fixed number of credits based on the contents to be learned. The student also has choice in selecting the courses offered by various other departments as electives. The grade points earned for each of the course reflects the student's proficiency in that course.

The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. The choice based credit system provides a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and adopt an interdisciplinary approach to learning.

The CBCS permits students to:

1. Choose electives from a wide range of elective courses offered by the departments.

2. Undergo additional courses of interest.

3. Adopt an interdisciplinary approach in learning.

4. Make the best use of expertise of the available faculty.

5. Not only bridges the gap between professional and social exposure but provides holistic education.

2. ADMISSIONS

2.1. B.TECH FOUR YEARS PROGRAMME (REGULAR)

Students seeking admission to the first semester of B.TechProgramme should have passed the Intermediate Examinations (10+2) with Mathematics, Physics and Chemistry as prescribed by the Andhra Pradesh State Council for Higher Education(APSCHE). Admissions to B.TechProgramme shall be through EAPCET, a common entrance test conducted by the State Government of Andhra Pradesh.

The total seats available as per the approved intake are grouped into two categories i.e. category A and Category B with a ratio of 70: 30 as per the state government guidelines vide G.O No.52.

The admissions for category A and B seats shall be as per the guidelines of Andhra Pradesh State Council for Higher Education (APSCHE) in consonance with government reservation policy.

Under Category A: 70% of the seats are filled through EAPCET counseling.

Under Category B: 30% seats are filled based on 10+2 merits in compliance with guidelines of APSCHE.

2.2. B.TECH LATERAL ENTRY PROGRAMME

Students who have acquired a Diploma in Engineering / Technology awarded by the State Board of Technical Education, Andhra Pradesh or its equivalent are eligible for admission to the third semester of the B.Tech Programme under Lateral Entry system. Under this system, seats sanctioned by the State Government will be available in each course as supernumerary seats. Admissions to this three year B. Tech lateral entry Programme will be through ECET.

3. ACADEMIC AFFAIRS

3.1 ACADEMIC PROGRAMMES

Following are the four year undergraduate Degree Programmes of study offered in various branches in Narayana Engineering College leading to the award of B.Tech (Bachelor of Technology) Degree:

S. No	Name of the Programme
1	Civil Engineering
2	Electrical and Electronics Engineering
3	Mechanical Engineering
4	Electronics and Communication Engineering
5	Electronics Engineering (VLSI Design And Technology)

6	Electronics And Communication(Advanced Communication Technology)
7	Computer Science and Engineering
8	Computer Science And Engineering (Artificial Intelligence And Machine Learning)

3.2 CATEGORIZATION OF COURSES

Each programme shall have a curriculum comprising of Theory, Theory-cum- Practical and Practical courses with well-defined Programme Outcomes(PO) and Programme Educational Objectives (PEO) as per Outcome Based Education (OBE) framework. The content of each course is designed based on the Course Outcomes (CO). The courses of a programme are categorized as follows:

Programme Core (PC): The programme core consists of set of courses considered necessary for the students of the specific programme. This is the course which is to be compulsorily studied by a student as a core to complete the requirement of a programme in a said discipline of study.

Professional Electives (PE): University Grants Commission has come up with the Choice Based Credit System (CBCS) in which the students have a choice to choose from the prescribed courses, which are referred as Professional elective courses. These courses include elective courses offered by the department, dealing with various aspects of application or new development or both related to the chosen branch of study. The number of professional electives in a curriculum shall be 5, which shall

be offered during semesters V to VII. Professional elective shall be pursued through MOOCS / regular mode with the approval of DAC and principal.

Students have to register for a total of 5 professional core electives courses (PE-I to PE-V) from the list of track-wise professional elective course as prescribed in the course structure of the programme.

If it is in regular mode the following points are considered for a Professional Elective Course.

- Maximum strength of a class /section for each semester shall be 72.
- A course may be offered to the students, only if a minimum of 20 students register for that course. However Head of the Institution shall approve for a lesser amount of registration list in case of specific requirements like placement opportunities, higher studies etc as a special case.
- The selection of course based on the choice for students shall be on 'first come first serve' through registration.

The Head of the department or concerned shall decide, whether or not to offer such course keeping in view the resources available in the department offering the course.

Open Electives (OE): Choice Based Credit System (CBCS) is promoted in such a way that different open elective courses should be offered by every department in engineering to other departments. This interdisciplinary learning of open elective courses by other department students will have learning awareness and job-oriented benefits. Students

require the opportunity to choose any open elective course from different departments and apply their knowledge to acquire jobs in that field of course. Learning and employment benefits are not only through their own core subjects but also through open elective courses. These Courses include the courses offered across all disciplines. Any student is permitted to register for these courses. There will be a pool of open elective courses offered by different departments for the students to choose from. The number of open electives in a curriculum shall be 4 which shall be offered during semestersV to VII.

The following guidelines are pertaining to Open Elective Courses.

- Maximum strength of a class /section for each semester shall be 72.
- A course may be offered to the students, only if a minimum of 20 students will register for that course.
- The selection of course based on the choice for students shall be on 'first come first serve' through registration.
- The Head of the department or concerned shall decide, whether or not to offer such course keeping in view the resources available in the department offering the course.

Proper choice of professional elective courses or open elective courses across Semesters V to VII will enable students to specialize in an emerging area within their chosen field of study. The concerned Faculty advisors/Mentors are to guide the students in making the appropriate choices.

Mandatory Courses / Audit Courses(MC) includes Environment science, Constitution of India, Essence of Indian Traditional Knowledge etc. These are non-credited courses that are required to be completed to fulfill the degree requirements. These courses will not be accounted for CGPA calculation. The number of hours allotted for each of these courses will be min 30 in a semester. A three week Induction programme is to be conducted in I semester. 3 mandatory courses included in the curriculum.

mandatory courses with no credits shall be evaluated for 30 mid semester marks.

Skill Enhancement Courses (SC):

A pool of interdisciplinary/job-oriented/domain skill courses which are relevant to the industry are integrated into the curriculum of all disciplines. There shall be 05 skill-oriented courses offered during III to VII semesters. Among the five skill courses, four courses shall focus on the basic and advanced skills related to the domain/interdisciplinary courses and the other shall be a soft skills course.

Skill-oriented courses from the same domain or Job oriented skill courses which can be of inter disciplinary nature. The student shall be given an option to choose either the skill courses being offered by the college or to choose a certificate course being offered by industries/Professional bodies/APSSDC or any other accredited bodies.

3.3 COURSE CODING AND COURSE NUMBERING

The Course Code consists of Seven digits/Alphabets. Description as Follows.

2	3	E	C	2	0	1	1

1. Year of beginning/ 2.Discipline of 3.Course 4.Course 5.Course
Approval of regulations Course Category Type Number

1.   The first two letters represent Year of beginning/ Approval of Regulations.

   Ex. A course with code starting with 21 represents a course belonging to 2021 Regulations.

2.   Third and Fourth Letters Indicates Discipline of Course.

Acronym	Name of the Discipline
BS	Basic Science
HS	Humanities & Social Sciences
ES	Engineering Science
CE	Civil Engineering
EE	Electrical & Electronics Engineering
ME	Mechanical Engineering
EC	Electronics & Communication Engineering

CS	Computer Science & Engineering
EV	Electronics Engineering (VLSI Design And Technology)
EA	Electronics And Communication(Advanced Communication Technology)
AM	Computer Science And Engineering (Artificial Intelligence And Machine Learning)
MA	Mathematics
PH	Physics
CH	Chemistry
EN	English
CC	Value added courses / Certificate courses
CD	Career Competency Development
IC	Industry Oriented Course
MB	Management
MC	Mandatory Course/AuditCourse

3. Fifth Letter Indicates Course Category

Sixth Character	**Description**
1	Institutional Core ie BS, HS and ES
2	Programme Core
3	Open elective
4	Professional Elective

5	Humanities and Social Sciences Elective
6	Skill Enhancement courses
7	Internship, project
8	Mandatory course/ Audit Course
H	Honors
M	Minor

4.   Sixth letter Indicates Course Type.

Fifth Character	Description
0	Theory Course
5	Laboratory / Practical Course

5.   Seventh and eighth Letters Indicates Course Sequence Number.

For Example:23 EC 2011 is Course offered in 2023 Regulations**(23)** in the Department of Electronics and Communication Engineering**(EC)**, The Course category is Programme core (2) of Theory type **(0)** and the course sequence number is **11**.

3.4 CREDIT STRUCTURE

The curriculum shall comprise Core Courses, Elective Courses, Open Electives, Laboratory Courses, Soft skill courses, Internship and Project. The list of elective courses may include subjects from allied disciplines also.

Each course offered is given a L-T-P structure, depending on the number of lecture periods (L), number of tutorial periods (T) and number of periods for practical (P) required per week for an efficient teaching – learning process. A student is expected to put- in his/her own efforts in proportion with periods spent in classroom, as defined in L-T-P structure. On successful completion of the course a student is said to have earned a specified number of credits defined for each course.

All Courses are to be registered by a student in a Semester to earn Credits. Credits shall be assigned to each Course in an L : T: P : C (Lecture Hours: Tutorial Hours: Practical Hours: Credits) Structure. 'Credit' means quantified and recognized learning. Credit is measured in terms of contact hours per week in a semester. Depending on the complexity and volume of the course, the number of contact hours per week will be assigned. Each Theory and Laboratory course carries credits based on the number of hours / week as follows:

- Theory Courses: One Lecture Hour (L) per week in a semester: 01 Credit
- Tutorial: One Tutorial Hour (T) per week in a semester: 01 Credit
- Practical Courses: One Practical Hour (P) per week in a semester: 0.5 Credit
- Mandatory Courses / Audit Courses: No CREDIT is awarded.

The total number of credits that a student earns during the period of study is called the total credits. For the successful completion of the B.Tech. Programme, a regular student must earn 160 credits in a

minimum of eight Semesters, while a lateral-entry student must earn 120 credits in a minimum of six semesters.

3.5 DURATION OF THE PROGRAMME

B.Tech Four Years Programme:

The course duration for the award of the Degree in **Bachelor of Technology** will be four academic years, with two semesters in each year. However if a student is unable to complete the course within 4 years, he/she can do so by giving more attempts but within 8 consecutive academic years from the date of admission.

Gap Year Concept:

Gap year concept for Student Entrepreneur in Residence is introduced and outstanding students who wish to pursue entrepreneurship / become entrepreneur are allowed to take a break of one year at any time after II year to pursue full-time entrepreneurship programme/to establish start-ups. This period may be extended to two years at the most and these two years would not be counted for the time for the maximum time for graduation.

B.Tech Lateral Entry Programme:

The course duration for the award of the Degree in **Bachelor of Technology under Lateral Entry Scheme** shall be three academic years, with two semesters in each year. However if a student is unable to complete the course within 3 years, he/she can do so by giving more

attempts but within 6 consecutive academic years from the date of admission.

Gap Year Concept:

Gap year concept for Student Entrepreneur in Residence is introduced and outstanding students who wish to pursue entrepreneurship / become entrepreneur are allowed to take a break of one year at any time after II year to pursue full-time entrepreneurship programme/to establish start-ups. This period may be extended to two years at the most and these two years would not be counted for the time for the maximum time for graduation.

3.6 PROGRAMMEPATTERN

i.   Total duration of the of B.Tech (Regular) Programme is four academic years.

ii.   Each academic year of study is divided into two semesters.

iii. Minimum number of instruction days in each semester is 90days.

iv.   There shall be mandatory student induction program for fresher's, with a three-week duration before the commencement of first semester. Physical activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to local Areas, Familiarization to Dept. / Branch & Innovations etc., are included as per the guidelines issued by AICTE.

v.   Health/wellness/yoga/sports and NSS /NSS /Scouts & Guides / Community service activities are made mandatory as credit courses for all the undergraduate students.

vi.   Courses like Environmental Sciences, Indian Constitution, Technical Paper Writing & IPR are offered as non-credit mandatory courses for all the under graduate students.

vii.   Design Thinking for Innovation & Tinkering Labs are made mandatory as credit courses for all the undergraduate students.

Increased flexibility for students through an increase in the elective componentof the curriculum, with 05 Professional Elective courses and 04 Open Electivecourses.

i.   Professional Elective Courses, include the elective courses relevant to the chosen specialization/branch. Proper choice of professional elective courses can lead to students specializing in emerging areas within the chosen field ofstudy.

ii.   A total of 04 Open Electives are offered in the curriculum. A student can complete the requirement for B.Tech. Degree with a Minor within the 160 credits by opting for the courses offered through various verticals/tracks under Open Electives.

iii.   While choosing the electives, students shall ensure that they do not opt for the courses with syllabus contents similar to courses already pursued.

iv.   A pool of interdisciplinary/job-oriented / domain skill courses which are relevant to the industry are integrated into the curriculum of all disciplines.There shall be 05 skill-oriented courses offered during III to VII semesters. Among the five skill courses, four course shall focus on the basic and advanced skills related to the domain/interdisciplinary

courses and the other shall be a soft skills course.

v.   Students shall undergo mandatory summer internships, for a minimum of eight weeks duration at the end of second and third year of the programme. The internship at the end of second year shall be community oriented and industry internship at the end of third year.

vi.   There shall also be mandatory full internship in the final semester of the programme along with the project work.

vii.   Undergraduate degree with Honors is introduced by the University for the students having good academic record.

viii.   Each Departments shall take measures to implement Virtual Labs (https://www.vlab.co.in) which provide remote access to labs invarious disciplines of Engineering and will help student in learning basic and advanced concept through remote experimentation. Student shall be made to work on virtual lab experiments during the regular labs.

ix.   Each college shall assign a faculty advisor/mentor after admission to a group of students from same department to provide guidance in courses registration/ career growth / placements / opportunities for higher studies /GATE/other competitive exams etc.

x.   Preferably 25% of course work for the theory courses in every semester shall be conducted in the blended mode of learning.

3.7 MEDIUM OF INSTRUCTION

The medium of instruction shall be **English** for all the courses including their content delivery, examinations, seminars, presentations and project evaluation as prescribed in the programme curriculum.

3.8 SEMESTER STRUCTURE

Each academic year is divided into two semesters – **Odd Semester** (usually from July to December) and **Even Semester** (usually from January to June). Each semester shall be of 21 weeks duration and this period includes time for registration of courses, coursework, examination preparation and conduct of examinations.

3.9 ACADEMIC CALENDAR

The schedule of academics and events in a semester is regulated by the Academic Calendar, and released at the beginning of each academic Semester. The Academic Calendar will be announced at least one calendar month before the commencement of each academic Semester. It is mandatory for students and faculty to strictly adhere to the academic calendar for completion of academic activities. The compliances of the Academic Calendar are monitored by Internal Quality Assurance Cell(IQAC).

The academic activities of the college are governed by academic calendar prepared by IQAC along with Dean academics and HODs. After the approval of Head of the Institution, it shall be notified at the beginning of the semester.

Academic calendar is made available to the students, faculty and all other concerned in electronic form or hard copy. It shall be mandatory for students and faculty to strictly adhere to the academic calendar for completion of academic activities. The copy of the academic calendar is also to be uploaded on the institute website. The curriculum shall be

typically delivered in two semesters in an academic year. Each semester shall be of 21 weeks duration (min 90 days). Generally, 14- 16 weeks for course content delivery and 4-6 weeks for examination shall be assigned in each semester.

CADEMIC CALENDAR

First Semester (20 weeks)	I Spell of Instructions	8 weeks	18 weeks
	II Spell of Instructions	8 weeks	
	I and II Mid Term Examinations	1 week	
	Preparation and Practical Examinations	1 week	
	Semester End Examinations		2 weeks
Semester Break and Supplementary Examinations			4weeks
Second Semester (20 weeks)	I Spell of Instructions	8 weeks	18 weeks
	II Spell of Instructions	8 weeks	
	I and II Mid Term Examinations	1 week	
	Preparation and Practical Examinations	1 week	
	Semester End Examinations		2 weeks
Summer Vacation and Supplementary Examinations			8 weeks

4. COURSE REGISTRATION

Each student has to compulsorily register for course work at the beginning of each semester as per the schedule mentioned in the Academic Calendar. Each student, on admission shall be assigned to a Faculty Mentor who shall advice and counsel the student about the

details of the academic programme and the choice of courses considering the student's academic background and career objectives. With the advice and consent of the Faculty Advisor/Mentor, the student shall register for a set of courses he/she plans to take up for the Semester.

It is absolutely compulsory for the student to register for courses in time. The registration will be organized departmentally under the supervision of the Head of the Department.

Each student on admission shall register for all the courses prescribed in the curriculum in the student's first and second Semesters of study. Except for the first semester of the first year, the enrolment for the courses shall commence 10 days prior to the last instructional day of the preceding semester for registration process. For first semester of First year, the course registration shall commence after completing the admission process.

- After registering for a course, a student shall attend the classes, satisfy the attendance requirements, earn Continuous Internal Evaluation marks and appear for the Semester End Examinations.

- A student will be eligible for enrolment only if he / she has cleared all the dues to the Institute, Tuition fee, Hostel fee etc till the end of the previous session, provided he/she is not debarred for enrolment by disciplinary action committee of the Institute.

- If a student fails to pay the fees dues, his/her result for the semester will remain withheld and he/she will not be in a position of

registering for the next semester, unless specifically approved by the competent authority.

- No Elective course shall be offered by a Department unless a minimum of 20 students register for that course. However Head of the Institution shall approve for a lesser amount of registration list in case of specific requirements like placement opportunities, higher studies etc as a special case.

- The registration sheet contains the course number, course name, number of credits and category for each course taken in that session.

- The students have to choose open elective/professional elective from the list of open/professional electives as prescribed in the course structure of the programme. Core courses can be chosen by the students of the respective disciplines only.

- If a student is prevented from writing Semester End Examination (SEE) of a course due to lack of attendance, the student has to register for that course again, when offered next, attend the classes and fulfill the attendance requirements

Course options exercised through registration are final and cannot be changed or inter- changed; however, if the course that has already been listed for registration by the HOD in a semester could not be offered due to any unforeseen or unexpected reasons, then the student shall be allowed to have alternate choice either for a new course (subject to offering of such a course), or for another existing course (subject to

availability of seats). Such alternate arrangements will be made by the HOD, with due notification and time schedule, within the first week after the commencement of class work for a given semester.

5. ACADEMIC SUPPORT FACILITIES

5.1 CLASS COUNSELOR (CC)

Each class of students belonging to different sections of all the three years(from II year to IV Year) has a Class Counselor (CC) who is a regular faculty member of the department. The Head of the Department (HOD) will appoint CCs for all the sections of their classes. The CCs will hold the responsibility for three years of the same batch of students until the completion of the programme. The CCs will maintain all records of the class of students assigned to them and generally counsel them on maintaining good attendance, discipline and academic performance. The responsibilities for the class counselor shall be:

- To act as the channel of communication between the HoD and the students of the respective class.

- To collect and maintain various statistical details of students.

- To help the class committee in planning and conduct of the class committee meetings.

- To monitor the academic performance of the students including attendance and to inform the class committee.

- To motivate and closely monitor the performance, motivate and mentor the students to work closely with the mentors on matters related to students.

- To attend to the students" welfare activities like awards, medals, scholarships and industrial visits etc.,

5.2 FACULTY MENTOR

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department will attach a certain number of students to a faculty member of the Department who shall function as FacultyMentor for those students throughout their period of study. Such Faculty Advisor/Mentor shall advise the students and monitor the courses taken by the students, check the attendance and progress of the students attached to him / her and counsel them periodically and provides professional counseling and psychological assistance for the student if necessary. Any student in the college has any issues related to academic performance, emotional disturbances, family issues, and behavioral /habitual disorders, social isolation etc is helped by professional counseling by the Faculty Mentor. The Faculty Mentor may also discuss with or inform the parents about the progress / performance of the students concerned. The Faculty Mentor counsels the student in a private confidential environment.

The responsibilities for the Faculty Mentor shall be:

- To act as the channels of communication across the HoD, the allotted students and Parents.

- To collect and maintain various statistical details of academic and other activities of the students

- To monitor the academic performance of the students including attendance and to inform to the parents.

- To attend to the students' welfare activities like awards, medals, scholarships and industrial visits.

- To attend to the students' grievance and redressal requirements and help them.

- To conduct Professional Counseling which help the students to vent, share and express their emotional outburst and suppressed feelings in a confidential environment.

- To help the student to overcome their emotional and psychological difficulties and become self-motivated, self-confident and self-reliant.

5.3 CLASS COMMITTEE

A class committee consists of teachers of the class concerned, student representatives and a coordinator. It is like the 'Quality Circle' (more commonly used in industries), with the overall goal of improving the teaching-learning process. The functions of the class committee include:

- Solving the problems experienced by students in the classroom and in the laboratories in consultation with Head of the Department.

- Clarifying the regulations of the degree programme and the details of the rules therein.

- Informing the student representatives about the academic schedule including the dates of assessments and the syllabus portion for each assessment.

- Informing the student representatives about the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory / project work etc.) the breakup of marks for each experiment / exercise / module of work, should be clearly discussed in the class committee meeting and informed to the students.

- Analysing the performance of the students after each test and finding remedial measures, if any.

- Identifying the slow learners, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such slow learners.

The class committee for a class under a particular programme is normally constituted by the Head of the department. However, if the students of different programmes are mixed in a class (like the first semester which is generally common to all programmes), the class committee is to be constituted by the Head of the Department concerned. The class committee shall be constituted in the first week of commencement of any semester. At least 6 student representatives

(usually 3 boys and 3 girls appointed by the HOD) and members of the faculty handling all the courses shall be included in the class committee. Class Counselor (CC) is the coordinator for the class committee.

The coordinator of the class committee may invite the Mentor(s) and the Head of the Department to the meeting of the class committee. The Head of the institution may participate in any class committee meeting.

The coordinator is required to prepare the minutes of every meeting, submit the same to HOD within two working days after the meeting and arrange to circulate among the concerned students and teachers. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the management by the head of the institution.

Three or four subsequent meetings may be held in a semester (preferably first week of every month) at suitable intervals. During these meetings, the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.For every class, a class committee shall be constituted by the Heads of Department, as given below:

Class Counsellor (CC)	Coordinator
Faculty of all the courses of study	Members
Six student representatives (usually 3 boys and 3 girls appointed by the HOD)	Members

5.4 COURSE COMMITTEE

Each common theory course offered to more than one section or more than one discipline or group, shall have a "Course Committee" comprising all the teachers teaching the common course with one of them nominated as course coordinator / module coordinator.

The nomination of the course coordinator shall be made by the Head of the Department / Head of the Institution depending upon whether all the teachers teaching the common course belong to a single department or to several departments.

The 'Course Committee' shall meet often and ensure uniform evaluation of the tests and arrive at a common scheme of evaluation for the tests. Where it is feasible, the course committee may also prepare a common question paper for the test(s).

The first meeting of the Common Course Committee shall be held within fifteen days from the date of formation of the committee. The nature and weightage of the continuous assessments shall be decided in the first meeting, within the framework of the Regulations. Two or three subsequent meetings in a semester may be held at suitable intervals.

5.5 DEPARTMENT ACADEMIC COMMITTEE (DAC)

Constitution:

1	Chairman	Head of the Department
2	Coordinator	Senior faculty member of the department nominated by thePrincipal

3	Members	Min Three faculty members at different levels nominated by theHOD

Coordinator shall prepare the meeting agenda. The agenda shall be circulated to all members in advance. The minutes of the meeting should be finalized by coordinator and circulate it to all members

Functions:

- To monitor the conduct of courses offered by the department.
- To help the HOD in the registration of all departmental subjects.
- Preparation of department academic calendar and implementation.
- At the start of semester elective courses are offered to the students as per their choice to be checked.
- To ensure academic standard and excellence of the courses offered by the department.
- Lecture plans, Practical plans, tutorial plans and CIE plans are prepared by individual course incharges to be checked.
- Student's academic progress review and contingency plan to meet the requirements of specified performance.
- Review of student attendance regularly given by the Attendance-Faculty incharge and to verify the measures taken to improve the students having low attendance.
- Review of completion of syllabus is taken at the end of every month.
- To oversee the evaluation of each course offered by the department.

- Keeping the record of CIE marks after verification and it is communicated to students and submitted to exam department.

- Question papers of SEE are compared with question papers of other reputed colleges for bench marking.

- Discussion on Modification in curriculum as per the stack holder's feedback and it is recommended to BOS.

- To recommend the list of students to be condoned and detained as per rules and regulations of the Institute.

- Department Academic Committee (DAC) has to approve the courses under MOOCs.

- Remedial Coaching shall be offered from II Semester to VII Semester based on the recommendations of the DAC

Tenure: Two Years

Frequency of Meeting: One time in a Month (Fourth Saturday) or meet as and when required.

Quorum: Four

6. ATTENDANCE REQUIREMENTS

A student will not be promoted to the next semester unless he satisfies the attendance requirements of the present semester. They may seek readmission for that semester from the date of commencement ofclass work.

Ideally every student is expected to attend all classes of all the courses and earn 100% attendance in each and every course.

- A student shall maintain not less than 75% (rounded off to the nearest higher integer) of attendance in each course of that semester and put in a minimum average attendance of 75% (rounded off to the nearest higher integer) in aggregate of all the Courses of that semester.

- Attendance for all eligible/mentioned credit courses shall be considered for calculation of aggregate attendance of that semester.

- Attendance for Mandatory courses (Non-Credit Courses) shall also be considered for calculation of aggregate attendance of that semester.

- A student shall be eligible to appear for Semester End examinations if he/she acquires a minimum of 40 % attendance in each course and 75% attendance in aggregate of all the courses.

- Condonation in shortage of attendance may be recommend by College Academic Committee (CAC) on the specific recommendation of the HOD and the student may be allowed to write the SEE if the student secures an overall average attendance between 65% and 74% (rounded off to the nearest higher integer) under the following conditions provided the principal is satisfied with the genuineness of the reasons.

- Medical Reasons (Hospitalization/accident/specific illness). Medical certificate, case file and discharge summary are to be submitted as proof of evidence for the reason claimed.

- Participation in College/University/State/National/International level sports and games, co-curricular and extra-curricular activities with prior approval.

- Application for medical leave, supported by medical certificate from a registered medical officer, shall reach the HoD with recommendations from Faculty Advisor/Mentor, within five instructional days after returning from leave. Certificates submitted afterwards shall not be entertained on any count. Application for Medical Leave will be considered only in cases where the student is not in a position to attend any of the classes during the period mentioned in the Medical Certificate. This concession can be availed only for any two semesters during the entire course of the study.

- In case of participation in co-curricular and extra-curricular activities, either in the college or other colleges, students must take prior written permission from HoD concerned and should also submit the certificate of participation from the organizer of the event within five days after the completion of the event for a maximum period of nine days.

- Shortage of Attendance below 65% in aggregate shall in NO CASE be condoned.

- A student availing Condonation shall pay the stipulated fee as prescribed by the college.

- A student suspended on disciplinary action for some period, that period will be treated as absent and attendance will not be considered for condonation.

- In case of the students having overall attendance less than 65% shall be declared detained and has to repeat semester again. He / she shall not be allowed to write the SEE, shall be detained in that semester and his / her registration for that semester shall stand cancelled. He / she shall not be promoted to the next semester unless he / she satisfy the attendance requirements of the current semester. They may seek readmission for that semester when offered next.

- A detained student shall seek readmission and repeat the incomplete semester in the next academic year. Academic regulations applicable to the semester in which readmission is sought shall be applicable to the re-admitted student as per the norms of the institute.

- Every member of the faculty handling a class shall record attendance on all hours of instruction. The course faculty of the course is required to finalize the attendance on the last instructional day of the course in the semester.

- For readmitted students attendance shall be calculated from the date of commencement of semester as prescribed in the academic calendar.

- For new admissions / Lateral entry / transferred students, attendance shall be considered from the date of admission of the student.

- Application for condonation recommended by the Faculty Advisor/Mentor and concerned Faculty is to be submitted to the HoD on or before the last instructional day of the semester/or on a date indicated by the department. The application for condonation should be accompanied by the copies of proofs of certificates of leave (obtained within the stipulated time and submitted to HOD).

- The students shall be informed about their attendance position periodically by the college so that the students can strive to makeup the shortage. However, non- receipt of such information from the college will not be considered as valid reason for exemption from the attendance requirements.

Attendance will be indicated in the marks memo by a letter code as follows:

Attendance percentage	Grading of Attendance	
90% - 100%	Very Good	A
80% - 89%	Good	B
75% - 79%	Satisfactory	C
65% - 74%	Poor	D

7. ASSESSMENT AND EVALUATION

The academic performance of a student in each semester shall be evaluated course wise using two Assessment tools.

1. **Continuous Internal Evaluation (CIE) :** The performance of the student in each course is evaluated by the faculty all through the semester; with midterm examinations, assignment test, project reviews, viva-voce, laboratory assessment and other means covering the entire syllabus of the course.

2. **Semester End Examination (SEE):** It shall be conducted by Controller of Examinations at the end of each semester, as per the academic calendar and with a written examination for theory courses and practical/project examination for laboratory/project.

    The division of marks and the assessment procedure for different types of courses offered during the period of study is as given below.

    Evaluation Process

    The performance of a student in each semester shall be evaluated subject wise with a maximum of 100 marks for theory and 100marks for practical subject. Summer Internships shall be evaluated for 50 marks, Full Internship &Project work in final semester shall be evaluated for 200 marks, and mandatory courses with no credits shall

beevaluatedfor30 mid semester marks.

A student has to secure not less than 35% of marks in the end examination and a minimum of 40% of marks in the sum total of the mid semester and end examination marks taken together for the theory, practical, design, drawing subject or project etc. In case of a mandatory course, he/she should secure 40% of the total marks.

7.1 THEORY COURSES

The syllabus for theory courses shall be divided into five modules and each module is given equal weightage in terms of distribution of marks. Each course shall be evaluated for a maximum of 100 marks. The distribution of marks shall be 30 marks for Continuous Internal Evaluation (CIE) and 70 marks for Semester End Examination (SEE).

Assessment Method	Marks
Continuous Internal Assessment	30
Semester End Examination	70
Total	**100**

i) For theory subject, the distribution shall be 30 marks for Internal Evaluation and 70 marks for the End-Examination.

ii) For practical subject, the distribution shall be 30 marks for Internal Evaluation and 70 marks for the End-Examination.

iii) If any course contains two different branch subjects, the syllabus shall be written in two parts with 3 units each (Part-A and Part-B)

and external examination question paper shall be set with two parts each for 35 marks.

iv) If any subject is having both theory and practical components, they will be evaluated separately as theory subject and practical subject. However, they will begiven same subject code with an extension of 'T' for theory subject and 'P' forpracticalsubject.

7.1.1 Continuous Internal Evaluation (CIE):

i) For theory subjects, during the semester, there shall be two midterm examinations. Each midterm examination shall be evaluated for 30 marks of which 10 marks for objective paper (20 minutes duration), 15 marks for subjective paper (90 minutes duration)and 5 marks for assignment.

ii) Objective paper shall contain for 05 short answer questions with 2 marks each or maximum of 20 bits for 10 marks. Subjective paper shall contain 3 either or type questions (totally six questions from 1 to 6) of which student has to answer one from each either-or type of questions. Each question carries 10 marks. The marks obtained in the subjective paper are condensed to 15 marks.

Note:

- The objective paper shall be prepared in line with the quality of competitive examinations questions.

- The subjective paper shall contain 3 either or type questions of equal weightage of 10 marks. Any fraction shall be rounded off to the next higher mark.

- The objective paper shall be conducted by the respective institution on the day of subjective paper test.

- Assignments shall be in the form of problems, mini projects, design problems, sliptests , quizzes etc., depending on the course content. It should be continuous assessment throughout the semester and the average marks shall beconsidered.

  If the student is absent for the mid semester examination, no re-exam shall beconducted and mid semester marks for that examination shall be considered aszero.

iii) First mid term examination shall be conducted for I, II units of syllabus with one either or type question from each unit and third either or type question from both the units. The second midterm examination shall be conducted for III, IV and V units with one either or type question from each unit.

iv) Final mid semester marks shall be arrived at by considering the marks secured by the student in both the mid examinations with 80% weight age given to the better mid exam and 20% to the other.

   For Example:

   Marks obtained in first mid: 25 Marks obtained in secondmid:20

   Marks Final mid semester Marks: (25x0.8) +(20x0.2) =24

If the student is absent for any one midterm examination, the final mid semestermarks shall be arrived at by considering 80% weight age to the marks secured by the student in the appeared examination and zero to the other.

For Example:

Marks obtained in first mid: Absent Marks obtained in second mid:25 Final mid semester Marks: $(25 \times 0.8) + (0 \times 0.2) = 20$

7.1.2. Semester end examination (SEE)/ End Examination Evaluation:

End examination of theory subjects shall have the following pattern:

i) There shall be 6questions and all questions are compulsory.

ii) Question I shall contain 10 compulsory short answer questions for a total of 20marks such that each question carries 2 marks.

iii) There shall be 2 short answer questions from each unit.

iv) In each of the questions from 2 to 6, there shall be either / or type questions of 10 marks each. Student shall answer any one of them.

v) The questions from 2 to 6 shall be set by covering one unit of the syllabus for each question.

End examination of theory subjects consisting of two parts of different subjects, for Example: Basic Electrical & Electronics Engineering shall have the following pattern:

i) Question paper shall be in two parts viz., Part A and Part B with equal weight age of 35 marks each.

ii) In each part, question 1 shall contain 5 compulsory short answer questions for a total of 5 marks such that each question carries 1 mark.

iii) In each part, questions from 2 to 4 , there shall be either /or type questions of 10marks each. Student shall answer any one of them. The questions from 2 to 4 shall be set by covering one unit of the syllabus for each question.

PracticalCourses

Assessment Method	Marks
Continuous Internal Assessment	30
Semester End Examination	70
Total	100

b) For practical courses, there shall be a continuous evaluation during the semester for 30 sessional marks and end examination shall be for70 marks.

c) Day-to-day work in the laboratory shall be evaluated for 15marks by the concerned laboratory teacher based on the record /viva and 15marks for the internal test.

d) The end examination shall be evaluated for 70marks, conducted by the concerned laboratory teacher and a senior expert in the subject from the same department.

- Procedure:20marks
- Experimental work & Results: 30marks
- Viva voce:20marks.

In a practical subject consisting of two parts (Eg: Basic Electrical & Electronics Engineering Lab), the end examination shall be conducted for 70marks as a single laboratory in3hours. Mid semester examination shall be evaluated as above for 30 marks in each part and final mid semester marks shall be arrived by considering the average of marks obtained in two parts.

e) For the subject having design and/or drawing, such as Engineering Drawing, the distribution of marks shall be 30 for mid semester evaluation and 70 for endexamination.

Assessment Method	Marks
Continuous Internal Assessment	30
Semester End Examination	70
Total	100

Day-to-day work shall be evaluated for 15 marks by the concerned subject teacher based on the reports/submissions prepared in the class. And there shall be two mid term examinations in a semester for durationof 2 hours each for 15

marks with weight age of 80% to better mid marks and 20% for the other. The subjective paper shall contain 3 either or type questions of equal weight age of 5 marks.There shall be no objective paper in mid semester examination. The sum of day-to-day evaluation and the mid semester marks will be the final sessional marks for the subject.

The end examination pattern for Engineering Graphics, shall consists of 5questions, either/or type, of 14 marks each. There shall be no objective type questions in the end examination. However, the end examination pattern for other subjects related to design/drawing, multiple branches, etc is mentioned along withthesyllabus.

f) There shall be no external examination for mandatory courses with zero credits.However, attendance shall be considered while calculating aggregate attendance and student shall be declared to have passed the mandatory course only when he/she secures 40% or more in the internal examinations. In case, the student fails, a re-examination shall be conducted for failed candidates for 30 marks satisfying the conditions mentioned in item 1&2 of the regulations.

g) The laboratory records and mid semester test papers shall be preserved for a minimum of 3 years in the respective institutions as per the University norms and shall be produced to the Committees of the University as and when the same

areaskedfor othersubjects related to design/drawing, multiple branches, etc is mentioned along with the syllabus.

h) There shall be no external examination for mandatory courses with zero credits.However, attendance shall be considered while calculating aggregate attendance and student shall be declared to have passed the mandatory course only when he/she secures 40% or more in the internal examinations. Incase, the student fails, a re-examination shall be conducted for failed candidates for 30marks satisfying the conditions mentioned in item 1&2 of the regulations.

b) The laboratory records and mid semester test papers shall be preserved for a minimum of 3 years in the respective institutions as per the University norms and shall be produced to the Committees of the University as and when the same are asked for.

7.2. SKILL ORIENTED COURSES

i) There shall be five skill-oriented courses offered during III to VII semesters.

ii) Out of the five skill courses two shall be skill-oriented courses from the same domain. Of the remaining three skill courses, one shall be a soft skill course and the remaining two shall be skill-advanced courses from the same domain / Inter disciplinary / Job oriented.

iii) The course shall carry 100 marks and shall be evaluated through continuous assessments during the semester for 30 sessional marks and end examination shall be for 70marks. Day-to-day work in the class/laboratory shall be evaluated for 30 marks by the concerned teacher based on the regularity/assignments/viva/mid semester test. The end examination similar to practical examination pattern shall be conducted by the concerned teacher and an expert in the subject nominated by the principal.

iv) The Head of the Department shall identify a faculty member as coordinator for thecourse. A committee consisting of the Head of the Department, coordinator and a senior Faculty member nominated by the Head of the Department shall monitor the evaluation process. The marks/grades shall be assigned to the students by the above committee based on their performance.

v) The student shall be given anoption to choose either the skill courses being offered by the college or to choose a certificate course being offered by industries/Professional bodies or any other accredited bodies. If a student choosesto take a Certificate Course offered by external agencies, the credits shall be awarded to the student upon producing the Course Completion Certificate from the agency. A committee shall be formed at the level of the college to evaluate the grades/marks given for a

course by external agencies and convert to the equivalentmarks/grades.

vi) The recommended courses offered by external agencies, conversions and appropriate grades/marks are to be approved by the Head of the Institution at the beginning of the semester. The principal of the respective college shall forward such proposals to the Head of the Institution for approval.

If a student prefers to take a certificate course offered by external agency, the department shall mark attendance of the student for the remaining courses in that semester excluding the skill course in all the calculations of mandatory attendance requirements upon producing a valid certificate as approved by the University.

7.3. TINKERING LABS

Tinkering Labs are for open-ended experimenting, with no single solution. Tinkering Labs have equipment appropriate to the year of the intended students so that they can tinker without the fear of damaging equipment. Tinkering Labs are intended to evolve with the institution. Tinkering Labs are intended towards life and creative skills. The skills developed in Tinkering Labs may or may not directly help in academics, but an indirect advantage is most certainly observed. Tinkering Labs have a directional curriculum that is not restrictive and

provides students with the scope to create and innovate. Same rules apply as of a laboratory course.

7.4. MANDATORY INTERNSHIPS

Summer Internships : Two summer internships either on site or virtual each with a minimum of 08 weeks duration, done at the end of second and third years, respectively are mandatory. It shall be completed in collaboration with local industries, Govt.Organizations , construction agencies, Power projects, software MNCs or any industries in the areas of concerned specialization of the Undergraduate program. One of the two summer internships at the end of second year (Community Service Project)shall be society oriented and shall be completed in collaboration with government organizations/NGOs & others. The other internship at the end of third year is Industry Internship and shall be completed in collaboration with Industries. The student shall register for the internship as per course structure after commencement of academic year. The guide lines issued by the APSCHE / University shall be followed for carrying out and evaluation of Community Service Project and Industry Internship.

Evaluation of the summer internships shall be through the departmental committee. A student will be required to submit a summer internship report to the concerned department and appear for an oral presentation before the departmental committee comprising of Head of the Department, supervisor of the internship and a senior faculty member of the department. A certificate of

successful completion from industry shall be included in the report. The report and the oral presentation shall carry 50% weight age each. It shall be evaluated for 50 external marks. There shall be nointernal marks for Summer Internship. A student shall secure minimum 40% of marksfor successful completion. In case, if a student fails, he/she shall reappear as and when semester supplementary examinations are conducted by the College.

Full Semester Internship and Project work:

In the final semester, the student should mandatorily register and undergo internship (onsite/virtual) and in parallel he/she should work on a project with well-defined objectives. At the end of the semester the candidate shall submit an internship completion certificate and a projectreport. A student shall also be permitted to submit project report on the work carriedoutduringtheinternship.

The project report shall be evaluated with an external examiner. The total marks forproject work 200 marks and distribution shall be 60 marks for internal and 140 marksfor external evaluation. The supervisor assesses the student for 30 marks (Report: 15marks, Seminar: 15 marks). At the end of the semester, all projects shall be showcasedat the departmentfor the benefit ofall students and staff andthe same is to be evaluated by the departmental Project Review Committee consisting of supervisor, a senior faculty and HOD for 30 marks. The external evaluation of Project Work is aViva-Voce

Examination conducted in the presence of internal examiner and external examiner appointed by the University and is evaluated for140 marks.

The college shall facilitate and monitor the student internship programs. Completion of internships is mandatory, if any student fails to complete internship, he/she will not be eligible for the award of degree. In such cases, the student shall repeat and complete the internship.

7.5 COMMUNITY SERVICE PROJECT

Community Service Project should be an integral part of the curriculum, as an alternative to the 4 weeks of Summer Internships / On the Job Training, whenever there is an exigency when students cannot pursue their summer internships/ On the Job Training.

Community Service Project is an experiential learning strategy that integrates meaningful community service with instruction, participation, learning and community development.

Community Service Project involves students in community development and service activities and applies the experience to personal and academic development.

Community Service Project is meant to link the community with the college for mutual benefit. The community will be benefited with the focused contribution of the college students for the village/ local development. The college finds an opportunity to develop social sensibility and responsibility among students and also emerge as a socially responsible institution.

The specific objectives are:

- To sensitize the students to the living conditions of the people who are around them.

- To help students to realize the stark realities of the society.

- To bring about an attitudinal change in the students and help them to develop societal consciousness, sensibility, responsibility and accountability

- To make students aware of their inner strength and help them to find new /out of box solutions to the social problems.

- To make students socially responsible citizens who are sensitive to the needs of the disadvantaged sections.

- To help students to initiate developmental activities in the community in coordination with public and government authorities.

- To develop a holistic life perspective among the students by making them study culture, traditions, habits, lifestyles, resource utilization, wastages and its management, social problems, public administration system and the roles and responsibilities of different persons across different social systems.

Implementation of Community Service Project

- Every student should put in a minimum of 180 hours for the Community Service Project during the summer vacation.

- Each class/section should be assigned with a mentor.

- Specific Departments could concentrate on their major areas of concern. For example, Dept. of Computer Science can take up activities related to Computer Literacy to different sections of people like - youth, women, house- wives, etc.

- A log book has to be maintained by each of the student, where the activities undertaken/involved to be recorded.

- The log book has to be countersigned by the concerned mentor/faculty incharge.

- Evaluation to be done based on the active participation of the student and grade could be awarded by the mentor/faculty member.

- The final evaluation to be reflected in the grade memo of the student.

- The Community Service Project should be different from the regular programmes of NSS/NCC/Green Corps/Red Ribbon Club, etc.

- Minor project report should be submitted by each student. An internal Viva shall also be conducted by a committee constituted by the principal of the college.

- Award of marks shall be made as per the guidelines of Internship/on the job training

Procedure

A group of students or even a single student could be assigned for a particular habitation or village or municipal ward, as far as possible, in

the near vicinity of their place of stay, so as to enable them to commute from their residence and return back by evening or so.

First, the student/s could conduct a survey of the habitation, if necessary, in terms of their own domain or subject area. Or it can even be a general survey, incorporating all the different areas. A common survey format could be designed. This should not be viewed as a duplication of work by the Village or Ward volunteers; rather, it could be another primary source of data.

Secondly, the student/s could take up a social activity, concerning their domain or subject area. The different areas, could be like Agriculture, Health, Marketing and Cooperation, Animal Husbandry, Horticulture, Fisheries, Revenue and Survey, Natural Disaster Management, Irrigation, Law & Order, Excise and Prohibition, Mines and Geology, Energy, Internet, Drinking Water etc.

7.6 MANDATORY COURSE /AUDIT COURSE

All students have to study mandatory courses. All the students (regular and lateral entry students) shall complete the mandatory course similar to other regular courses.

No credits will be given for the mandatory courses. Assessment shall be conducted and grading without credit shall be given in the grade sheet.

These are non-credited courses that are required to be completed to fulfill the degree requirements. These courses will not be accounted for CGPA calculation. The number of hours allotted for each of these courses will be minimum 30 in a semester.

Attendance for mandatory courses is compulsory and shall be considered while calculating the aggregate attendance.

The performance of the student in these courses will not be considered for the vertical progression.

Provisional pass certificate of B.Tech degree will be issued only, when the student pass the mandatory courses.

A three week Induction programme is to be conducted in 0th semester.

List of mandatory courses will be notified at the beginning of semester.

A minimum of 3 mandatory courses selected from the following table apart from the **Induction Programme (MC1)** shall be completed by the student from II semester to VIII semester. **Environmental Sciences (MC2). Technical Paper Writing & IPR (MC3) & Constitution of India (MC4)** is to be offered compulsorily as mandatory course for all branches.

Mandatory courses with no credits shall be evaluated for 30 mid semester marks.

MC Code	Subject
MC1	Induction Programme
MC2	Environmental Sciences
MC3	Technical Paper Writing & IPR
MC4	Constitution of India

8. VIRTUAL LABORATORIES

Our college shall take measures to implement VirtualLabs (https://www.vlab.co.in) which provide remote access to labs in various disciplines of Engineering and will help student in learning basic and advanced concept through remote experimentation. Student shall be made to work on virtual lab experiments during the regular labs.

The laboratory/hands-on sessions are the backbone of engineering education. But in current situation, costly equipment, the availability of resources limit doing experiments; especially when they involve sophisticated instruments, and limited expertise often put constraints on performing experiments. The recent technological advances have addressed this problem. Now, it is possible to overcome these constraints by using web enabled experiments for remote operation so as to enthuse the innovation of students.

The Virtual Labs are essentially comprising of a user-friendly graphical front-end, working in synchronization with a backend, consisting of a simulation-engine running on a server or actual measurement data or a remotely-triggered experiment.

It is expected that the competence level of the engineering students will enhance through the use of these labs. The Virtual Labs are expected to enthuse students about performing 'experiments' and thereby getting them interested in their respective disciplines in a meaningful way. The virtual labs are designed in such a manner that maximum number of students can use these labs simultaneously.

The basic idea is to design and develop Virtual Labs in suitable areas of science and engineering in order to benefit the maximum number of students.

Departments shall define the list of virtual laboratories that a student can take up during the duration of course. It is expected that the students shall carry out these experiments prior to their actual experiment for the labs specified in the course syllabus. Virtual laboratory shall be perused by a student in addition to the mandatory requirement of pursuing practical courses as specified in the course structure of the programme. In case of non-availability of the sophisticated instruments/systems these experiments will fulfill the requirement of understanding the technology. Advanced laboratories / experiments / experiments beyond syllabus / additional experiments that are not existing in the Institute and are required for supplementing the knowledge gained in specific course(s) may be pursued by the students through the use of Virtual Labs.

9. MOOCs

Meeting with the global requirements, to inculcate the habit of self-learning and in compliance with UGC guidelines, MOOC (Massive Open Online Course) have been introduced.Greater flexibility to choose variety of courses is provided through Massive Open Online Courses (MOOCs) during the period of study.

A Student has to pursue and complete onecourse compulsorily through MOOCsapproved by the University. A student can pursue courses other

than core throughMOOCs and it is mandatory to complete one course successfully through MOOCs forawarding the degree. A student is not permitted to register and pursue core coursesthroughMOOCs.

A student shall register for the course (Minimum of either 8 weeks or 12 weeks)offered through MOOCs with the approval of Head of the Department. The Head ofthe Department shall appoint one mentor to monitor the student's progression. Thestudent needs to earn a certificate by passing the exam. The student shall be awardedthecreditsassignedinthecurriculumonlybysubmissionofthecertifi cate.Examinationfee, ifany,will bebornebythestudent.

Studentswhohavequalifiedintheproctoredexaminationsconductedthrough MOOCs platform can apply for credit transfer as specified and are exempted fromappearing internal as well as external examination (for the specified equivalent creditcourseonly) conducted bytheuniversity.

Necessary amendments in rules and regulations regarding adoption of MOOC courseswouldbeproposed from timeto time.

10. CREDIT TRANSFER POLICY

Adoption of MOOCs is mandatory, to enable Blended model of teaching-learning as also envisaged in the NEP2020. As per University Grants Commission (Credit Frame work for Online Learning Courses through SWAYAM) Regulation, 2016, the

College shall allow up to a maximum of 20% of the total courses being offered in a particular programme i.e., maximum of 32 credits through MOOCs platform.

i) The College shall offer credit mobility for MOOCs and give the equivalent credit weight age to the students for the credits earned through online learning courses.

ii) Student registration for the MOOCs shall be only through the respective department of the institution, it is mandatory for the student to share necessary information with the department.

iii)   Credit transfer policy will be applicable to the Professional & Open Elective courses only.

iv) The concerned department shall identify the courses permitted for credit transfer.

The institution shall notify at the beginning of semester the list of the online learning courses eligible for credit transfer.

v) The Department shall designate a faculty member as a Mentor for each course to guide the students from registration till completion of the credit course.

vi) The College shall ensure no overlap of MOOC exams with that of the university examination schedule. In case of delay in results, the university will re-issue the marks sheet for such students.

vii)   Student pursuing courses under MOOCs shall acquire the required credits only after successful completion of the course and submitting a certificate issued by the competent authority along with

the percentage of marks and grades.

viii)   The Department shall submit the following to the examination section of the College:

a) List of students who have passed MOOC courses in the current semester along with the certificate of completion.

b) Undertaking form filled by the students for credit transfer.

ix) The universities shall resolve any issues that may arise in the implementation of this policy from time to time and shall review its credit transfer policy in the light of periodic changes brought by UGC,SWAYAM,NPTEL and state government.

Note: Students shall be permitted to register for MOOCs offered through online platforms approved by the University from time to time.

11. ACADEMIC BANK OF CREDITS (ABC)

The College has implemented Academic Bank of Credits (ABC) to promote flexibility in curriculumas per NEP 2020 to

i.   Provide option of mobility for learners across the universities of their choice

ii.   Provide option to gain the credits through MOOCs from approved digital plat forms.

iii.   Facilitate award of certificate/diploma/degree in line with the

accumulated credits in ABC

iv.   Execute Multiple Entry and Exit system with credit count, credit transfer and credit acceptance from students' account.

12. TESTS & EXAMINATIONS

12.1 SEMESTER END EXAMINATION

Semester End Examination means the examination to be held at the end of each semester separately for theory and practical courses on such dates as per the Academic Calendar.

12.2 SUPPLEMENTARY EXAMINATION

In addition to the regular semester-end examinations conducted, the College may also schedule and conduct supplementary examinations for all the courses of other semesters when feasible. Such candidates writing supplementary examinations may have to write more than one examination per day.

12.3 ADVANCED SUPPLEMENTARY EXAMINATION

Advanced Supplementary Examination shall be conducted at the end of VIII Semester as follows:

- Advanced Supplementary Examination may be conducted immediately after the publication of the results of the VIII Semester for candidates who have not more than three arrears in theory / laboratory courses. However students with four arrears and more will not be entertained.

Controller of Examinations shall publish a schedule of advanced supplementary examination. The pattern of evaluation will be the same as that of the end semester examination. Such appearance in an advanced supplementary examination will be treated as another attempt.

After submission of Project Report, if a student is unable to attend Project Viva-Voce examination in VIII Semester due to valid reasons (medically unfit / unexpected family situations), he/she is eligible to reappear for the advanced supplementary examination, subject to the number of arrear courses, including Project Work, is limited to three.

There shall be no advanced supplementary examination for a student who has failed in the project work offered in the VIII semester. If a student fails in the Project Work, he/she has to re-register for the course, in the subsequent regular semester(s).

However, those candidates who fail in the advanced supplementary examination shall appear for subsequent supplementary examinations along with regular candidates conducted at the end of the respective academic year.

12.4 EVALUATION PROCEDURE

The performance of a student in each semester shall be evaluated subject wise with a maximum of 100 marks for theory and 100 marks for practical subject. Summer Internships shall be evaluated for 50 marks, Full Internship &Project work in final semester shall be evaluated for 200 marks, mandatory courses with no credits shall be

evaluated for 30 mid semester marks.

A student has to secure not less than 35% of marks in the end examination and a minimum of 40% of marks in the sum total of the mid semester and end examination marks taken together for the theory, practical, design, drawing subject or project etc. In case of a mandatory course, he/she should secure 40% of the total marks.

Following procedure governs the evaluation.

Marks for components evaluated internally by the faculty shall be submitted to the Controller of Examinations through Head of the department. The marks for the internal evaluation components shall be added to the external evaluation marks secured in the Semester-end examinations, to arrive at the total marks for any course in that semester.

Question Paper setting for Semester End Examination (SEE) shall be done by External Senior Faculty.

Answer Scripts of Semester End Exams (SEE) will be sent to external examiners for First evaluation. After first evaluation scrutiny of answer scripts will be done internally. As per the scrutiny if there are any corrections, changes will be incorporated accordingly. Failed candidates in each subject shall be identified after scrutiny. Answer scripts of failed candidates will be sent to external examiners for second evaluation. Students passed in second evaluation are declared to be passed. For other students marks obtained in the first evaluation are final. If the difference of marks in first evaluation and second evaluation is more than 15 marks then answer scripts will be sent to external

examiners for third evaluation. Students who passed in the third evaluation will be declared as passed. Marks awarded in the Third evaluation will be declared as final marks.

Performance in all the courses is tabulated course-wise and shall be scrutinized by the Results Committee and moderation is applied if needed and course-wise marks are finalized. Total marks obtained in each course are converted into letter grades. Student-wise tabulation shall be done and individual grade Sheet shall be generated and issued to the student.

12.5 RECOUNTING:

Students shall be permitted for recounting of the Semester-end examination answer scripts within a stipulated period. After recounting, records are updated with changes if any and the student shall be issued a revised grade sheet. If there are no changes, the student shall be intimated the same through a notice.

12.6 CHALLENGE VALUATION:

- Challenge Evaluation of answer script will be carried out only for the LATEST semester whose result has been declared. There will be a single notification inviting applications from the students, to apply for Challenge Evaluation of Answer Scripts mentioning the last date.

- Students may apply for Challenge Evaluation by paying the requisite fee. After the last date, additional time may be granted, subject to the approval from the competent authority. However, under such case student will have to pay a late fine(non-refundable) for applying for

Challenge Evaluation. A student cannot apply Challenge Evaluation of answer scripts in the subjects other than the THEORY subjects.

- After the last day of application for challenge evaluation, the exam section shall initiate the process of challenge evaluation as per the procedure detailed here under:

    (i) Each Answer script marked for Challenge Evaluation will be revaluated by two evaluators.

    (ii) After the revaluation, if the difference between the marks awarded by the two re-evaluators is more than 20% maximum marks of that subject, then such scripts shall be evaluated once again by a third examiner(who has not evaluated the script in the first valuation).

12.7 RETENTION OF ANSWER SCRIPTS:

The answer scripts shall be preserved for a period of q3

13. REMEDIAL CLASSES

The slow learners are characterized by relatively poor comprehensive power, fail to grasp information effectively, have difficulty in understanding abstract concepts, and need more time in understanding subject, weak in problem-solving power. In order to effectively meet the requirements of slow learners institute conducts the remedial classes (RC) on a regular basis with one-to-one attention. Remedial classes are conducted for slow learners in order to help them in achieving the academic requirements of the engineering course

Objectives:

- To leverage the learning skills of slow learners with different learning ability, academic standards and academic performance.

- To help slow learners who have fallen behind to learn to the best of their ability and to bring them back into the mainstream classes as far as possible.

- To gradually increase the self-confidence to face questions/exams and create awareness about incremental learning.

The remedial classes are conducted after the class hours or free time during the semester days for the students who need the coaching in the required courses. The activities of the remedial class work like selection of the course, student, staff, preparation of the schedule and report are carried out by Faculty In-charge - RC in consultation with HOD.

Procedure regarding the conduct of Remedial Classes (RC):

Diagnostic test (DT) for a course has to be conducted by the respective teachers. This DT must be conducted within 3-4 weeks of commencement of classes or midway between the commencement of classes and Mid Term Examination. If no DTs are conducted, the Mid Term Examination/Assignment Tests may also be used as one of the DT. it is preferred that remedial classes to be conducted two times in a semester based on the DT(Mid Term Examination/Assignment Tests) one after 3-4 weeks of commencement of classes another two weeks before the end of the class work.

Student securing less than 50% in the DTs be considered as a slow learner. Concerned HoD to identify a maximum of 3 such subjects for each class.

The faculty identified for conducting the remedial classes for a course must be, as far as possible, faculty teaching the course or a senior regular internal faculty member with experience of teaching the subject. The faculty must be willing to undertake the task with zeal and must be tasked with selecting the contents, pedagogy and delivery processes with a view to stimulate the interest of the students in the RCs so as to enable the student to produce a difference in the final-examinations outcome.

HOD will schedule the timetable as per the requirement after discussing the same with the faculty of identified subjects. While making the time table for RCs clashes with the regular time tables must be taken into account. Remedial classes (RC) are usually scheduled to conduct the classes during Saturday afternoons and after regular class hours.

Faculty in-charge - RC prepare the list of weak students for RC and submit to the HoD. Remedial classes to be conducted as per schedule. An attendance sheet is maintained by the faculty members, which includes the student attendance and topics covered in the class on daily basis.

Finally, at the end of the semester Faculty In-charge - RC shall prepare the consolidated report of the remedial classes and submit the same to the department head.

14. REMEDIAL COACHING

Remedial Coaching is conducted for the benefit of the Students who have arrears in the previous Semester, with a special focus on subjects in which number of Students have failed. Remedial Coaching is planned and conducted in order to support such students to overcome their learning difficulties, gain confidence and interest in learning. The Remedial Coaching is conducted for selected subjects immediately after the completion of class work of the current semester for a period of two weeks without disturbing the regular instructional hours.

Remedial Coaching shall be offered for subjects with more number of failures and the list of such subjects shall be decided by the DAC. Remedial Coaching shall be offered from II Semester to VII Semester. It is mandatory for students having backlogs to attend the Remedial coaching. Students shall be permitted to register for supplementary examinations for subjects where Remedial Coaching is offered only if they attend all the classes of remedial coaching and maintain 100% attendance. The students shall submit the certificate of attendance provided by the department to the controller of examination to be eligible to register for supplementary examination. An attendance sheet shall be maintained by the faculty members, which includes the student attendance and topics covered in the class on daily basis.

If a student fails to attend the remedial coaching (for subject it is offered) and maintain the required percentage of attendance, the student shall not

be permitted to register for the supplementary examination for that semester. He / she can do so only after attending the Remedial Coaching and maintain the required percentage of attendance for that subject whenever it is offered in future.

15. ACTIVITY POINT PROGRAMME (APP)

Apart from technical knowledge and skills, to be successful as professionals, students should have excellent soft skills, leadership qualities and team spirit. They should have entrepreneurial capabilities and societal commitment. In order to nurture these qualities, NEC has introduced activity points to be earned by the students during their academic stay at the college covering extra-curricular and co- curricular activities.

Every regular student, who is admitted to the B.Tech Degree programme, is required to earn 80 Activity Points in addition to the required academic grades, for getting 4 Years degree programme. Students entering B.Tech Degree programme through lateral entry are required to earn 60 Activity Points, in addition to the academic grades, for getting B.Tech degree program.

The Activities can be spread over the years (during the programme), any time during the semester weekends and holidays, as per the interest and convenience of the student from the year of entry to the programme. However, minimum hours specified must be satisfied.

Professor in-charge of Centre for Extension Activities (CEA) is the Coordinator for conducting APP. These activities will be conducted by CEA/ Sports / NSS/ departments/ hobby clubs/ TPO of the Institute. The student has to register for APP in the beginning of the semester with registration fee. Every student is required to prepare a file containing documentary proofs of activities, done by him/ her. This file will be duly verified by the concerned coordinator NSS/Sports /CEA/HOD/TPO and submit to the Coordinator of APP. Coordinator shall consolidate the activity points earned by students on a semester basis and enter the consolidated points on an academic year basis. Then he will send the consolidated report of activity points earned by the students to the controller of examination duly signed by the concerned HOD and Head of the Institution after verification. All documental proof for awarding the activity points should be obtained and kept with the Coordinator to be verified by the Academic Audit team.

The student should earn at least 80 activity points before he/ she appears for his/ her Final Examinations. The points students earned will be reflected on the student's transcript. However, there will be neither grades/ marks for these points nor will there be any effect on SGPA/CGPA and shall not be considered for vertical progression. Student has to earn 80 Activity Points (60 Activity points for lateral entry, out of 100 activity points) out of 140 points offered during four years/eight semesters (Each semester 20 Activity points). **In case students fail to earn the prescribed activity points, eighth semester**

grade card shall be issued only after earning the required activity points. Students shall be admitted for the award of degree only after release of the eighth semester grade card.

In case if the students fail to earn 80 activity points by the end of seventh semester, He/She shall gain the remaining activity points in the eight semester. If a student fails to achieve the required APP points by the end of course work, Head of the Institution after recommendation from APP committee will decide appropriate remedial contribution to society by such candidate.

APP committee:

1	Coordinator	CEA Professor in charge
2	Members	Head of the Department
		Department Faculty In-charge
		Controller of Examinations
		Dean –Academics

The Main Activity Segments are as given below:

1. CEA/NSS/National Initiatives

2. Sports & Games

3. Cultural Activities

4. Women's form activities

5. Hobby clubs Activities

6. Professional society Activities

7. Dept. Students Association Activities

8. Technical Club Activities

9. Innovation and Incubation Cell Activities

10. Professional Self Initiatives

11. Others

S No	Nature of Activity	Activity Points
1. CEA/NSS/National Initiatives		
1	Registration for CEA/NSS	2
2	Participation in Various Activities Conducted by CEA/ NSS (For each activity)(Activities mentioned below)*	2
3	Prize/Award at college level activity	3
4	Prize/Award at university level activity	10
5	Prize/Award at National level activity	20
2. Sports & Games		
1	Registration for Sports/Games clubs	2
2	Participation in Various Activities Conducted by Sports & Games dept. at college level (For each activity)	2
3	Participation in Various ActivitiesConducted at university/District level (For each activity)	5

4	Participation in Various Activities Conducted at State level (For each activity)	7
5	Participation in Various Activities Conducted at National level (For each activity)	10
6	Prize/Award at college level activity	2
7	Prize/Award at university/district level activity	10
8	Prize/Award at National level activity	20
3. Cultural Activities		
1	Participation in cultural Activities Conducted at college/ Dept. level like Annual Day/Fresher's Day/ Dept. Day (For each activity)	2
2	Participation in cultural Activities Conducted at college level during Independence Day/Republic Day (For each activity)	3
3	Participation in cultural Activities Conducted at college/ Dept. level (Outside) during various events (For each activity)	7
4	Prize/Award in cultural activity at college/Dept level	3
5	Prize/Award in cultural activity at college/Dept level (outside) during various events.	10
6	Prize/Award in cultural activity at University level during various events.	12

4. Women's forum activities		
1	Membership in women's forum	2
2	Participation in Various Activities Conducted by women's forum at college level (For each activity)	2
3	Participation in Various Activities conducted at university/District level (For each activity)	5
4	Participation in Various Activities conducted at state level/National level (For each activity)	7
5	Participation in Various Activities Conducted at Inter National level (For each activity)	10
6	Prize/Award at college level activity	3
7	Prize/Award at university/district/state level activity	10
8	Prize/Award at National /international level activity	20
5. Hobby clubs Activities		
1	Membership in Hobby Clubs	2
2	Participation in Various ActivitiesConducted by Hobby Clubs at collegelevel (For each activity)	2
3	ParticipationinVariousActivitiesConductedat university/District level (For each activity)	5
4	Participation in Various Activities Conducted at State level (For each activity)	7
5	Participation in Various Activities Conducted at	10

	National level (For each activity)	
6	Prize/Award at college level activity	3
7	Prize/Award at university/district state level activity	10
8	Prize/Award at National level activity	20
6. Professional society Activities		
1	Membership in Professional Societies	2
2	Participation in Competitions conducted by Professional Societies - (IEEE, CSI,IE etc.) at college level (Outside)	2
3	Participation in Competitions conducted by Professional Societies - (IEEE, CSI,IE etc.) at University /National level	6
4	Prize/Award at college level activity	3
5	Prize/Award at university/district level activity	10
6	Prize/Award at National level activity	20
7. Dept. Students Association Activities		
1	Membership in Dept. Students Association	2
2	Participation in Competitions conducted by Dept. Students Association at college level (Outside)	5
3	Participation in Competitions conducted by Dept. Students Association at University / National level	6
4	Prize/Award at college level activity	3

5	Prize/Award at university/district level activity	10
6	Prize/Award at National level activity	20
8. Technical Club Activities		
1	Membership in Technical Club at college level	2
2	Participation in Competitions conducted by Technical Club at college level (Outside)	5
3	Participation in Competitions conducted by Technical Club at University/National level	6
4	Prize/Award at college level activity	3
5	Prize/Award at university/district level activity	10
6	Prize/Award at National level activity	20
9. Innovation and Incubation Cell Activities		
1	Participation in Competitions conducted by IIC at college level	2
2	Participation in Competitions conducted by IIC at college level (Outside)	5
3	Participation in Competitions conducted by IIC at University Level	6
4	Prize/Award at college level activity	3
5	Prize/Award at university/district level activity	10
6	Prize/Award at National level activity	20
7	Patent-Filed/Published	20

8	Prototype developed and tested	20
9	Awards for Products developed	15
10	Innovative technologies developed and used by industries/users	20
11	Got venture capital funding for innovative ideas/products.	20
12	Societal innovations	20
10. Professional Self Initiatives		
1	Participation (Registration) in Tech Fest/NLTS/projectexhibitionsetc at the college level	2
2	Participation (Registration) in Tech Fest/ NLTS / project exhibitions etc at the college level(Outside)	3
3	Prize/Award in Tech Fest/NLTS/ project exhibitions etc at the college level	3
4	Prize/Award in Tech Fest/NLTS/ project exhibitions etc at the college level(Outside)	5
5	Presentation in Tech Fest/NLTS etc at University/NIT/IIT level	5
6	Prize/Award in Tech Fest/NLTS etc at University/NIT/IIT level	10
7	student representatives at Department level	2
11. Others		

1	Member/participation in various cells and committees at college/department level	2
2	Industrial visits-Participation and submission of report	3

At any point of time the student is allowed to acquire maximum cumulative pointsupto that semester.

Semester	Maximum cumulative points
I	20
II	40
III	60
IV	80
V	100
VI	120
VII	140

16. PROMOTION RULES

The following academic requirements must be satisfied in addition to the attendancerequirementsmentioned in section 16.

i) A student shall be promoted from first year to second year if he/she fulfils theminimumattendancerequirement as pernorms.

ii) A student will be promoted fromII toIII year if he/she fulfils the academicrequirementof securing 40% of the credits (any *decimal* fraction shouldbe *rounded off*to *lower* digit) up to in the subjects that

have been studied up to IIIsemester.

iii) A student shall be promoted from III year to IV year if he/she fulfils the academicrequirementsofsecuring40% of the credits (any *decimal* fraction shouldbe *roundedoff* to *lower* digit)inthesubjectsthathavebeenstudieduptoVsemester.

And in case a student is detained for want of credits for a particular academicyearbyii)&iii)above,thestudentmaymakeupthecreditsthroughsupplementary examinations and only after securing the required credits he/sheshall be permitted to join in the V semester or VII semester respectively as thecasemaybe.

When a studentis detained due to lack of credits/shortage of attendance he/shemay be re-admitted when the semester is offered after fulfilment of academicregulations. In such case, he/she shall be in the academic regulations into whichhe/sheis readmitted.

17. OPPORTUNITIES FOR ADDITIONAL LEARNING

17.1 HONOURS DEGREE IN A DISCIPLINE

Guidelines for offering Honors

The objective of introducing B.Tech. (Hons.) is to facilitate the students to choose additionally the specialized courses of their choice and build their competence in a specialized area in the UG level. The programme is a best choice for academically excellent students having good academic record and interest towards higher studies and research.

i) Honors is introduced in the curriculum of all B. Tech. programs offering a major degree and is applicable to all B. Tech (Regular and Lateral Entry) students admitted in Engineering & Technology.

ii) A student shall earn additional 15 credits for award of B.Tech. (Honors) degree from same branch/department/discipline registered for major degree. This is in addition to the credits essential for obtaining the Undergraduate degree in Major Discipline (i.e., 160credits).

iii) A student is permitted to register for Honors in IV semester after the results of III Semester are declared and students may be allowed to take maximum two subjects per semester pertaining to the Honors from V Semester onwards.

iv) The Concerned Principal of the college shall arrange separate class work and timetable of the courses offered under Honors program.

v) Courses that are used to fulfil the student's primary major may not be double counted towards the Honors. Courses with content substantially equivalent to courses in the student's primary Major may not be counted towards the Honors.

vi) Students can complete the courses offered under Honors either in the college or in online platforms like SWAYAM with a minimum duration of 12 weeks for a 3-credit course and 8 weeks duration for a 2-credit course satisfying the criteria for credit mobility. If the courses under Honors are offered in conventional mode, then the

teaching and evaluation procedure shall be similar to regular B. Tech courses

vii) The attendance for the registered courses under Honors and regular courses offered for Major degree in a semester are to be considered separately.

viii) A student shall maintain an attendance of 75% in all registered courses under Honors to be eligible for attending semester end examinations.

ix) A student registered for Honors shall pass in all subjects that constitute the requirement for the Honors degree program. No class/division (i.e., second class, first class and distinction, etc.) shall be awarded for Honors degree programme.

x) If a student drops or is terminated from the Honors program, the additional credits so far earned cannot be converted into open or core electives; they will remain extra. However, such students will receive a separate grade sheet mentioning the additional courses completed by them.

xi) The Honors will be mentioned in the degree certificate as Bachelor of Technology (Honors) in XYZ. For example, B.Tech. (Honors) in Mechanical Engineering

Enrolment into Honors:

i) Students of a Department/Discipline are eligible to opt for Honors program offered by the same Department/Discipline

ii) The enrolment of student into Honors is based on the CGPA

obtained in the major degree program. CGPA shall be taken up to III semester in case of regular entry students and only III semester in case of lateral entry students. Students having 7 CGPA without any backlog subjects will be permitted to register for Honors.

iii)   If a student is detained due to lack of attendance either in Major or in Honors, registration shall be cancelled.

iv)   Transfer of credits from Honors to regular B. Tech degree and vice-versa shall not be permitted.

Honors is to be completed simultaneously with a Major degree program.

Registration for Honors:

i)   The institution will announce courses offered by the departments under Honors before the start of the semester.

ii)   The eligible and interested students shall apply through the HOD of his/her parent department. The whole process should be completed within one week before the start of every semester. Selected students shall be permitted to register the courses under Honors.

iii)   The selected students shall submit their willingness to the Principal through his/her parent department offering Honors. The parent department shall maintain the record of student pursuing the Honors.

iv) The students enrolled in the Honors courses will be monitored continuously. An advisor/mentor from parent department shall be assigned to a group of students to monitor the progress.

v) There is no fee for registration of subjects for Honors program offered in offline at the respective institutions.

17.2 MINOR DEGREE IN A DISCIPLINE

Guidelines for offering a Minor

To promote interdisciplinary knowledge among the students, the students admitted into B.Tech. in a major stream/branch are eligible to obtain degree in Minor in another stream.

i) The Minor program requires the completion of 12 credits in Minor stream chosen.

ii) Two courses for 06 credits related to a Minor are to be pursued compulsorily for the minor degree, but maybe waived for students who have done similar/equivalent courses. If waived for a student, then the student must take an extra elective course in its place. It is recommended that students should complete the compulsory courses (or equivalents) before registering for the electives.

Electives (minimum of 2 courses) to complete a total of 12 credits.

Note: A total of 04 Open Electives are offered in the curriculum. A student cancomplete the requirement for Minor by opting for the courses offered through variousverticals/tracksunderOpen Electives.

18. MINIMUM ACADEMIC REQUIREMENTS

In addition to the attendance requirements mentioned, regulations for the award of B.Tech. Degree, a student must satisfy the minimum academic requirements as given below:

A student shall be deemed to have satisfied the minimum academic requirements and earn the credits for each theory or practical or design or drawing course in B.Tech. Programme: if he secures

Theory courses: A student is declared to have passed in a theory course if he / she secure not less than 35% marks in SEE and 40% of marks on the whole (including CIE & SEE).

Laboratory courses: A student is declared to have passed in a laboratory course if he / she secures not less than 35% marks in SEE and 40% of marks on the whole (including CIE & SEE).

Summer Internship/on the job training: A student is declared to have passed in Summer Internship/on the job training if he / she secures 50% marks in SEE.

Project Work, Seminar and Internship: A student is declared to have passed in Project Work, Seminar and Internship if he / she secures 40% marks in SEE and 50% of marks on the whole (including CIE & SEE).

Mandatory course: A student is required to score minimum 40% marks out of 30 marks in each of the mandatory courses to pass.

Activity Point Programme (APP): Student has to earn 80 Activity Points (60 Activity points for lateral entry) out of 140 points offered during four years/eight semesters (Each semester 20 Activity points).

A student shall register for all the courses covering 160credits(120 credits for Lateral entry) as specified and listed in the course structure of the B.Tech. Programme, fulfills all the attendance and academic requirements for 160credits(120 credits for Lateral entry), 'earn all 160 credits(120 credits for Lateral entry)' to successfully complete the undergraduate programme.

Tinkering Lab/ Design Thinking & Innovation: A student is declared to have passed in Tinkering Lab/ Design Thinking & Innovation course if he / she secures not less than 35% marks in SEE and 40% of marks on the whole (including CIE & SEE).

If a student fails to secure a pass grade in a particular course, it is mandatory that he shall register and reappear for the examination in that course during the next semester when SEE is conducted in that course. It is mandatory that he should continue to register and reappear for the examination till he secures a pass grade.

A student detained in a semester due to shortage of attendance, may be re-admitted into the same semester in the next academic year for fulfillment of the academic requirements.

Academic regulations applicable to the semester in which re-admission is sought shall be applicable to the re-admitted student. However, no

grade allotments or SGPA/ CGPA calculations shall be done for the entire semester in which the student has been detained.

A student detained due to lack of credits, shall be promoted to the next year only after acquiring the required academic credits. Academic regulations applicable to the semester in which re-admission is sought shall be applicable to the re-admitted student.

Students who fail to earn at least 160 credits(120 credits for Lateral entry) as indicated in the course structure within eight academic years(Six years for Lateral entry) counting from the year of their admission shall forfeit their seat in B.Tech. programme and their admission stands cancelled.

19. AWARD OF DEGREE

19.1 GRADING SYSTEM

After each subject is evaluated for 100 marks, the marks obtained in each subject will be converted to a corresponding letter grade as given below, depending on the range in which the marks obtained by the student.

Marks Range	Level	Letter Grade	Grade Point
≥ 90	Outstanding	A+	10
80-89	Excellent	A	9
70-79	Very Good	B	8

60-69	Good	C	7
50-59	Fair	D	6
40-49	Satisfactory	E	5
< 40	Fail	F	0
-	Absent	Ab	0

19.2 SGPA AND CGPA

Calculation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i.   The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student,i.e.SGPA = Σ (Ci × Gi)/ Σ Ci

Where, Ci is the number of credits of the ith subject and Gi is the grade point scored by the student in the ith course

ii. The Cumulative Grade Point Average (CGPA) will be computed in the same manner taking into account all the courses undergone by a student over all the semesters of a programme,i.e.

CGPA = Σ (Ci × Si)/ Σ Ci

Where 'Si' is the SGPA of the ith semester and Ci is the total number of credits in that semester

iii. Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

iv. While computing the SGPA/CGPA, the subjects in which the student is awarded Zero grade points will also be included.

v. *Grade Point:* It is a numerical weight allotted to each letter grade on a 10- point scale.

vi. *Letter Grade:* It is an index of the performance of students in a said course. Grades are denoted by letters A+, A, B, C, D, E and F.

vii. As per AICTE regulations, conversion ofCGPA into equivalent percentage as follows:

Equivalent Percentage = (CGPA – 0.50) × 10

19.3 AWARD OF CLASS

After a student has satisfied the requirements prescribed for the completion of the programme and are eligible for the award of B.Tech. Degree, he/she shall be placed in one of the following:

Class Awarded	CGPA Secured
First Class with Distinction	≥ 7.5
First Class	≥ 6.5 < 7.5
Second Class	≥ 5.5 < 6.5
Pass Class	≥ 5.0 < 5.5

19.4 AWARD OF GOLD MEDALS

Students fulfilling the following conditions 1 and 2 alone will be eligible for award of '**Gold Medal**'.

1. Should have passed all the subjects/courses in '**first appearance'** within the first 4 academic years (or 8 sequential semesters) from the date of commencement of first year first semester.

2. Should not have been detained or prevented from writing the semester end examinations in any semester due to shortage of attendance or any other reason.

19.5 GRADUATION DAY/CONVOCATION

The college shall have its own annual Graduation Day for the award of degrees, best outgoing student from each branch, best outgoing student from college and Gold Medals to the students completing the prescribed academic requirements in each case, in consultation with the University and by following the provisions in the Statute. The college shall give prizes and medals to meritorious students and award them annually at the Graduation Day. This will greatly encourage the students to strive for excellence in their academic work.

20. TRANSITORY REGULATIONS

A candidate, who is detained or discontinued in the semester, on re-admission shall be required to pass all the courses in the curriculum prescribed for such batch of students in which the student joins subsequently and the academic regulations be applicable to him/her which are in force at the time of his/her admission. However, exemption will be given to those candidates who have already passed in such

courses in the earlier semester(s) and additional courses are to be studied as approved by Board of Studies and ratified by Academic Council.

21. AMENDMENT OF REGULATIONS

The Academic Council of Narayana Engineering College, Gudur (Autonomous) may revise, amend or change the regulations, schemes of examinations and / or syllabi or any other policy relevant to the need of the society or industry etc from time to time if found necessary with the recommendations of the concerned Board of Studies.

22. CODE OF CONDUCT AND DISCIPLINE

1. Students shall conduct themselves within and outside the premises of the Institute in a befitting manner.

2. As per the order of Honorable Supreme Court of India, ragging in any form is considered as criminal offence and is banned. Any form of ragging 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 with regard to ragging.

   a) Lack of courtesy and decorum; indecent behavior anywhere within or outside the campus.

   b) Willful damage or distribution of alcoholic drinks or any kind of narcotics to fellow students/citizens

4 The following activities are not allowed within the campus

c) Possession, consumption or distribution of alcoholic drinks or any kind of narcotics or hallucinogenic drugs.

d) Mutilation or unauthorized possession of library books.

e) Noisy and unseemly behavior, disturbing studies of fellow students.

f) Hacking computer systems (such as entering into other persons areas without prior permission, manipulation and/or damage of computer hardware and software or any other cybercrime etc.)

g) Use of cell phones in the campus.

h) Plagiarism of any nature.

i) Any other act of gross indiscipline as decided by the college from time to time.

5. Commensurate with the gravity of offense, the punishment may be reprimand, fine, expulsion from the institute / hostel, debarment from an examination, disallowing the use of certain facilities of the Institute, rustication for a specified period or even outright expulsion from the Institute, or even handing over the case to appropriate law enforcement authorities or the judiciary, as required by the circumstances.

6. For an offence committed in (i) a hostel (ii) a department or in a class room and (iii) elsewhere, the Chief Warden, the Head of the Department and the Head of the Institution, respectively, shall have the authority to reprimand or impose fine.

7. Cases of adoption of unfair means and/or any malpractice in an examinations hall be reported to the Head of the Institution for taking appropriate action.

8. Un-authorized collection of money in any form is strictly prohibited.

9. Detained and Break-in-Study candidates are allowed into the campus for academic purposes only with permission from Authorities.

10. Misconduct committed by a student outside the college campus but having the effect of damaging, undermining & tarnishing the image & reputation of the institution will make the student concerned liable for disciplinary action commensurate with the nature & gravity of such misconduct.

11. The Disciplinary Action Committee constituted by the Head of the Institution, shall be the authority to investigate the details of the offence, and recommend disciplinary action based on the nature and extent of the offence committed.

12. "Grievance Appeal Committee" (General) constituted by the Head of the Institution shall deal with all grievances pertaining to the academic / administrative /disciplinary matters.

13. All the students must abide by the conduct and discipline rules of the college.

23. STANDING COMMITTEE

A Standing Committee is functional to take immediate policy decisions. This committee is constituted for the smooth functioning of the various

autonomous programmesof the institute and shall consist of the following members:

Principal	Convener
Dean-Academics	Member
All HODs	Member(s)
Member Secretary, Academic Council	Member
Controller of Examinations	Member

In the event of any clarification in the interpretation of the above rules and regulations, they shall be referred to the Standing Committee. The Standing Committee meets on a need basis to make decisions regarding important / policy types of decision regarding an issue(s) arising and demanding immediate attention without for the next immediate Academic Council meeting. The Standing Committee will offer suitable interpretations/ clarifications/amendments required for the special case on such references. The committee will meet as and when necessary and send its recommendations to the Academic Council for consideration / ratification / approval. The term of the members is not fixed as the members by their designations are to be members of the Standing Committee.

24. Multiple Entry/Exit Option

(a) Exit Policy:

The students can choose to exit the four-year programme at the

end of first/second/third year.

i) UG Certificate in (Field of study/discipline) - Programme duration: First year (first two semesters) of the undergraduate programme, 40 credits followed by an additional exit 10-credit bridge course(s) lasting two months, including at least 6- credit job-specific internship/ apprenticeship that would help the candidates acquire job-ready competencies required to enter the workforce.

ii) UG Diploma (in Field of study/discipline) - Programme duration: First two years (first four semesters) of the undergraduate programme, 80 credits followed by an additional exit 10-credit bridge course(s) lasting two months, including at least 6- credit job-specific internship/ apprenticeship that would help the candidates acquire job-ready competencies required to enter the workforce.

iii) Bachelor of Science (in Field of study/discipline) i.e., B.Sc. Engineering in(Field of study/discipline)- Programme duration: First three years (first six semesters) of the undergraduate programme, 120 credits.

(b) Entry Policy:

Modalities on multiple entry by the student into the B.Tech. programme will be provided in due course of time.

Note: The College shall resolve any issues that may arise in the implementation of Multiple Entry and Exit policies from time to time and shall review the policies in the light of periodic changes brought by UGC, AICTE and State government.

25. GAP YEAR CONCEPT

Gap year concept for Student Entrepreneur in Residence is introduced and outstanding students who wish to pursue entrepreneurship / become entrepreneur are allowed to take a break of one year at any time after II year to pursue full-time entrepreneurship programme/to establish start-ups. This period may be extended to two years at the most and these two years would not be counted for the time for the maximum time for graduation. The principal of the respective college shall forward such proposals submitted by the students to the University. An evaluation committee constituted by the University shall evaluate the proposal submitted by the student and the committee shall decide whether to permit the student(s) to avail the Gap Year or not

26. STUDENT TRANSFERS

Student transfers shall be as per the guidelines issued by the Government of Andhra Pradesh and the Universities from time to time.

27. RULES FOR DISCIPLINARY ACTION FOR MALPRACTICES/ IMPROPER CONDUCT IN EXAMINATIONS.

	Nature of Malpractices/Improper conduct	Punishment
	If the candidate	
1. (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation of the performance in that subject only.
(b)	Gives assistance or guidance or	Expulsion from the examination

	receives it from any other candidate orally or by any other body language metHODs or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject of the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The Hall Ticket of the candidate is to be cancelled and sent to the University.
3.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all

		other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.
4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.

5.	Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
6.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project

		work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat.
7.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is

		subject to the academic regulations in connection with forfeiture of seat. If the impostor is an outsider, he will be handed over to the police and a case is registered against him.
8.	Refuses to obey the orders of the Chief Superintendent/Assistant – Superintendent / any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the officer-in charge or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.

	officer-in-charge, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the College campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination.	
9.	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be

	to 8.	permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.
10.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester/year examinations.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be	

reported to the University for further action to award suitable punishment.	

ACADEMIC REGULATIONS (NECR B.Tech 23) FOR B.TECH (LATERAL ENTRY SCHEME)

(Effective for the students getting admitted into II year through Lateral Entry Scheme from the Academic Year 2021-2022 onwards)

1. **Award of B.Tech. Degree**: A student admitted in Lateral Entry Scheme (LES) will be declared eligible for the award of the B.Tech degree if the student fulfils the following academic regulations:

   1.1 Pursues a course of study for not less than three academic years and not more than six academic years.

   1.2 Registers for 120 credits and secures all 120 credits from II year to IV year (III Semester to VIII Semester) of Regular B. Tech. programme.

2. Students, who fail to fulfill the requirement for the award of the degree within six consecutive academic years from the year of admission, shall forfeit their seat.

3. The regulations 1 to 24 except 2.1 and 15 are to be adopted as that of B. Tech. (Regular).

4. **Minimum Academic Requirements:** The following academic requirements have to be satisfied in addition to the attendance requirements mentioned in item no.6 as that of B. Tech. (Regular).

   4.1 A student shall be deemed to have satisfied the minimum academic requirements mentioned in item no. 17 as that of B. Tech (Regular).

   4.2 A student shall be promoted from third year to fourth year only if the student fulfils the academic requirements of securing 40% of credits from the following examinations, irrespective of whether the candidate takes the end examination or not as per the normal course of study.

   B.Tech III Semester - one Regular and three Supplementary

   B.Tech IV Semester - one Regular and two Supplementary

   B.Tech V Semester - one Regular and one Supplementary

   B.Tech VI Semester – One Regular only

   4.3 In case if student is already detained for want of credits for particular academic year, the student may make up the credits through supplementary exams of the above exams before the commencement of VII semester class work of next year.

5. **Course Pattern**

   5.1 The entire course of study is three academic years on semester pattern.

5.2 A student eligible to appear for the end examination in a subject, but absent at it or has failed in the end examination may appear for that subject at the next supplementary examination offered.

5.3 When a student is detained due to lack of credits/shortage of attendance the student may be re-admitted when the semester is offered after fulfillment of academic regulations, the student shall be in the academic regulations into which he/she is readmitted.