

**N.B.K.R. INSTITUTE OF SCIENCE & TECHNOLOGY
(AUTONOMOUS)**

ACADEMIC REGULATIONS (R23)

for

B. Tech Degree Program

**(effective for the students admitted into I B. Tech
from the academic year 2023 -24 onwards)**

&

B.Tech. (Lateral Entry Scheme)

**(effective for the students admitted into II B. Tech
from the academic year 2024 -25 onwards)**

1. Admissions

Admission to the B. Tech Program shall be made subject to the eligibility, qualifications and specialization prescribed by the A.P. State Government/University from time to time. Admissions shall be made either based on the merit rank obtained by the student in the common entrance examination conducted by the A.P. Government/University or any other order of merit approved by the A.P. Government/University, subject to reservations as prescribed by the Government/University from time to time.

2. Branches of B. Tech. Degree Program

2.1 The branches of study in B.Tech Degree program offered by the Institute are

- (a) Civil Engineering**
- (b) Electrical & Electronics Engineering**
- (c) Electronics & Communication Engineering**
- (d) Mechanical Engineering**
- (e) Computer Science & Engineering**
- (f) Information Technology**
- (g) Artificial Intelligence & Data Science**
- (h) CSE (Artificial Intelligence & Machine Learning)**
- (i) CSE (Data Science)**

2.2 A student is required to choose the branch of study at the time of admission. No change of branch shall be permitted after the closure of admissions by the competent authority, nominated by the Government of Andhra Pradesh.

3. Programme Pattern

3.1 Duration of B.Tech Program

The duration of the regular B. Tech program is of four academic years and that for B.Tech. (Lateral Entry Scheme) is of three academic years. Semester pattern shall be followed for all the years of study with two semesters in each academic year.

3.2 Instruction Days

Each semester shall consist of a minimum of 90 working days, including the days allotted for tests.

3.3 Student Induction Program

There shall be a mandatory student induction program for freshers, for a duration of three-weeks 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.

4. Classification of Courses

4.1 Credit Courses

Courses of the B. Tech programme which can be registered by a student in a semester in order to earn credits are called credit courses. These courses comprise of Foundation Core Courses Professional Core and Professional Elective courses (PC and PE), Massive Open Online Courses (MOOC) and Open Electives (OE).

4.1.1 Foundation Core Courses

Foundation Core Courses include the courses of Basic Sciences (BS), Engineering Sciences (ES), Humanities and Social Sciences (H&S). These courses Include Mathematics, Physics and Chemistry; fundamental engineering courses; humanities, social sciences and management courses; Health/wellness/yoga/sports and NSS /NSS /Scouts & Guides / Community service activities; Design Thinking for Innovation & Tinkering Labs.

4.1.2 Professional Core (PC) Courses

The Professional Core (PC) courses include subjects related to the parent discipline / Department / Branch of Engineering.

4.1.3 Professional Elective (PE) Courses

Professional Elective (PE) courses will be taken from a list of subjects prescribed by the Department concerned, covering courses from the chosen specialization/branch and allied disciplines. Proper choice of professional elective courses can lead the students to specialize in emerging areas within the chosen field of study. These courses shall reflect different specialized topics in a field including the latest developments taking place around the world.

4.1.4 Open Elective (OE) Courses

Open electives shall cover courses from any department of the Institute. These will generally be broad based courses that will widen the knowledge horizon of the students. OE courses include interdisciplinary subjects or subjects in an area outside the parent discipline / Department/Branch of Engineering. A given course may be a core subject for one Department and an elective for another. 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. While choosing the electives, students shall ensure that they do not opt for the courses with syllabus contents similar to courses already pursued.

4.1.5 Skill Oriented Course (SOC)

A pool of interdisciplinary/job-oriented/domain skill courses which are relevant to the industry are integrated into the curriculum of all disciplines. 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 or any other accredited bodies. If a student chooses to 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 Department to evaluate the grades/marks given for a course by external agencies and convert to the equivalent marks/grades. The recommended courses offered by external agencies, conversions and appropriate grades/marks are to be approved by the department at the beginning of the semester.

- (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/Interdisciplinary/Job oriented.
- (iii) 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.

4.1.6 Internships

Two internships either onsite or virtual each with a minimum of 08 weeks duration, done by the end of second and third years respectively are mandatory.

One internship called as “Community Service Project” shall be completed by the end of second year. It shall be society oriented and in collaboration with government organizations / NGOs & others.

The other internship shall be completed by the end of third year. It shall be industry-based internship and 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.

The student shall register for the internship as per course structure after commencement of academic year.

The guidelines issued by the APSCHE / University shall be followed for carrying out and evaluation of Community Service Project and Industry Internship.

The Internships may be completed in a phased manner with a minimum duration of one week in each phase during inter-semester break / summer vacation. The student shall obtain prior permission from the concerned head of the department regarding the industry / company in which the internship is carried out. Every student shall submit a report on the work carried out during the internship in the format specified by the department and shall also submit evidence of on-site internship from the concerned authorities in the industry / company in which the internship is carried out.

The report of internship will be evaluated by the examiners for the award of two credits in VIII semester.

4.1.7 Massive Open Online Courses MOOCS

A student can pursue courses other than core through MOOCs of minimum 8 weeks duration offered by authorized Institutions / Agencies at any time after completion of the course work of first year with the approval of the Head of the Department concerned. The Head of the Department shall appoint one mentor to monitor the student's progression. It is mandatory to complete one course successfully through MOOCs for awarding the degree.

Examination fee, if any, will be borne by the student.

Necessary amendments in rules and regulations regarding adoption of MOOC courses would be proposed from time to time.

4.1.8 Full semester internship and project work

In the final semester, the student should register and undergo mandatory internship (onsite/virtual). The student should work parallelly on a project with well-defined objectives.

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.

4.2 Mandatory Courses

Courses which develop familiarity on peripheral subjects in a programme are the mandatory courses. These are the non-credit courses. Only a pass is sufficient to qualify for the award of a degree. Courses like Environmental Sciences, Indian Constitution, Technical Paper Writing & IPR are offered as non-credit mandatory courses for all the undergraduate students.

4.3 Audit Courses

Students to be able to register for Courses outside the prescribed range of Credits for audit only, when interested to supplement their knowledge/skills; Optional for students to appear / pass in Continuous Internal Evaluation (CIE), Semester End Examination (SEE) of these courses and/or seek their inclusion in the Grade cards or Transcripts issued (but, not for earning Credit). Courses like Environmental Sciences, Indian Constitution, Technical Paper Writing & IPR are offered as non-credit mandatory courses for all the undergraduate students.

5. Credits

Credit defines the quantum of syllabus prescribed for a course and the number of instruction hours per week. The norms for assigning credits to a course for duration of one semester shall be as follows:

for 1 hour lecture (L) per week	1 Credit
for 1 hour of tutorial (T) per week	1 Credit
for 1 hour practical (P) per week	0.5 Credit
for 2 hours practical / drawing(L) per week	1 Credit

6. Evaluation Process

(i) The performance of the students in each semester shall be evaluated subject-wise. The distribution of marks for evaluation of internal and End Semester Examinations is as follows:

	Sessional Marks	End Sem Exam Marks	Total
Theory courses	30	70	100
Design/Drawing	30	70	100
Practical's	30	70	100
Internship	30	70	100
Skill Oriented Courses	30	70	100
MOOC	30	70	100
Mandatory Courses	30	00	30
Internship & Project work	60	140	200

(ii) 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.

(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 be given same subject code with an extension of 'T' for theory subject and 'P' for practical subject.

6.1 Continuous Internal Evaluation

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

- (i) 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 either online or offline by the respective institution on the day of subjective paper test.
- If conducted offline, the midterm examination shall be conducted first by distribution of the Objective paper, simultaneously marking the attendance, after 20 minutes the answered objective paper shall be collected back. The student is not allowed to leave the examination hall.

Then the descriptive question paper and the answer booklet shall be distributed. After 90 minutes the answered booklets are collected back.

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

- (ii) If a student is absent for any test or examination, the marks awarded for that test or examination shall be zero. Further, no re-examination shall be conducted.
- (iii) First midterm 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) The final sessional marks shall be arrived at by considering the marks secured in both mid examinations with 80% weightage given to the better exam and 20% to the other.

6.1.2 In case of practical subjects the sessional marks will be awarded based on day-to-day class work and one test towards the end of the Semester. The distribution of sessional marks shall be 15 for day-to-day class work and 15 for the test conducted at the end of semester.

6.1.3 For the subject having design and / or drawing, such as Engineering Drawing, Machine Drawing and estimation etc., the Internal evaluation will be for 15 marks for day- to-day work in the class that shall be evaluated by the concerned subject teacher based on the reports / submissions prepared in the class. There shall be two midterm exams in a Semester for a duration of 2 hrs each, evenly distributed over the syllabi, for 15 marks with weightage of 80% of the better and 20% of the other. The subjective paper shall contain 3 either or type questions of equal weightage 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.

6.1.4 In case of internship the distribution of sessional marks shall be 10 for the preparatory work before commencing internship and 20 for the progress awarded by the supervisor in the department based on the reviews.

6.1.5 In case of full semester internship and project work the distribution of sessional marks shall be 15 for the report and 15 for the seminar. The supervisor assesses the report and seminar of the student and awards sessional marks. At the end of the semester, all projects shall be showcased in the department for the benefit of all students and staff and the same is to be evaluated by the departmental Project Review

Committee consisting of supervisor, a senior faculty and HOD for 30 marks.

6.1.6 For MOOCS, the evaluation shall be for 30 internal marks. The performance shall be evaluated by the faculty concerned based on the reviews.

6.1.7 For Skill Oriented Course the day-to-day work in the class / laboratory shall be evaluated for 30 internal marks by the concerned teacher based on the regularity/assignments/viva/mid semester test.

6.2 End Semester Examination Evaluation

For each of the theory, design/drawing courses, there shall be an end semester examination of three hours duration at the end of each semester,

6.2.1 End semester examination of theory subjects shall have the following pattern:

- (i) There shall be 6 questions 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.
 - a) 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.
- (iv) 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 weightage 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 10 marks each. Student shall answer any one of them.
- (iv) The questions from 2 to 4 shall be set by covering one unit of the syllabus for each question.

6.2.2 For practical courses the end semester examination shall be evaluated for 70 marks, conducted by the concerned laboratory teacher and a senior expert in the subject from the same department appointed by Principal / Director.

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

In a practical subject consisting of two parts (Eg: Basic Electrical & Electronics Engineering Lab), the end examination shall be conducted for 70 marks as a single laboratory in 3 hours.

6.2.3 The end examination pattern for Engineering Graphics, shall consist of 5 questions, 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 with the syllabus.

6.2.4 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.

6.2.5 End semester examination evaluation of the summer internships for 30 marks shall be through the departmental committee. A student will be required to submit 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 35 marks weightage each.. A student shall secure minimum 40% of marks for successful completion. In case, a student fails, he/she shall reappear as and when semester supplementary examinations are conducted.

6.2.6 In case of SOC the end semester examination similar to practical examination pattern shall be conducted by the concerned teacher and an expert in the subject nominated by the principal.

The Head of the Department shall identify a faculty member as coordinator for the course. 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.

6.2.7 In case of full semester internship and project work the candidate shall submit reports of internship and project work along with internship completion certificate at the end of the semester.

The project report shall be evaluated by an external examiner. The external evaluation of Project Work is a Viva-Voce Examination conducted in the presence of internal examiner and external examiner appointed by the University and is evaluated for 140 marks.

6.2.8 In case of MOOC students who have qualified in the proctored examinations conducted through MOOCs platform can apply for credit transfer for the specified equivalent credit course.

7. Conduct of End Semester Examinations

All regular examinations are understood as regular / supplementary examinations. The supplementary students have to appear for the supplementary examination along with regular examination conducted at the end of each semester. However, separate supplementary examinations will be conducted for the second semester subjects after completion of end semester examinations of first semester and vice-versa.

A student eligible for the end semester examination in a subject, but absent for it or has failed in the end examination may appear for that subject at the next examination as and when it is held.

Question paper setting shall be undertaken by the institute, choosing external / internal examiner from the panels recommended by the respective Board of Studies. Evaluation of answer scripts shall also be undertaken by the institute by choosing external/internal examiners from the panels recommended by the respective Board of Studies.

Project Viva-voce examination shall be conducted by two internal examiners and one external examiner. The appointment of internal and external examiners for the conduct of Viva voce examinations shall be made by the Principal / Director from the panels recommended by the respective Board of Studies. Panel of Examiners must consist of two internal and six external examiners.

8. Credit Transfer Policy

Adoption of MOOCs is mandatory, to enable Blended model of teaching-learning as also envisaged in the NEP 2020. As per University Grants Commission (Credit Framework for Online Learning Courses through SWAYAM) Regulation, 2016, the Institute 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 Institute shall offer credit mobility for MOOCs and give the equivalent credit weightage 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.

- (v) The Institution shall notify at the beginning of semester the list of the online learning courses eligible for credit transfer.
- (vi) The Institution shall designate a faculty member as a Mentor for each course to guide the students from registration till completion of the credit course.
- (vii) The Institute shall ensure no overlap of MOOC exams with that of the university examination schedule. In case of delay in results, the Institute will re-issue the marks sheet for such students.
- (viii) 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.
- (ix) The Departments shall submit the following to the examination section of the Institute:
 - 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.
- (x) The Institute 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 the University, UGC, SWAYAM, NPTEL and state government.

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

9. Revaluation / Recounting

Students shall be permitted to request for revaluation / recounting of the end theory examination answer scripts within a stipulated period after payment of the requisite fee.

If a student gets higher marks after revaluation, those marks shall be considered. Otherwise, the previous marks shall be retained. Revaluation shall be done by another examiner appointed by the Principal / Director.

After revaluation / recounting, records are updated with changes if any, and the student shall be issued a revised memorandum of marks. If there are no changes, the student shall be intimated the same.

In the recounting process, the valued answer script shall be scrutinized jointly by the Controller of Examinations and a faculty nominated by the Principal / Director.

10. Malpractices in Examinations

The disciplinary action for malpractices in examinations shall be enforced as per the detailed guidelines enclosed in Annexure -1.

11. Grading

As a measure of the student's performance, a 10-point Absolute Grading System using the following Letter Grades and corresponding percentage of marks shall be followed:

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

Structure of Grading of Academic Performance

Marks Range	Grade	Grade points Assigned
≥ 90	Superior	10
80-89	A (Excellent)	9
70-79	B (Very Good)	8
60-69	C (Good)	7
50-59	D (Average)	6
40-49	E (Pass)	5
< 40	F (Fail)	0
Absent	Ab (Absent)	0

11.1 Semester Grade Point Average (SGPA)

The Semester Grade Point Average for each semester is calculated as follows:

$$SGPA = \frac{\sum_1^n (C_i)(GP_i)}{TC}$$

Where

- n = number of subjects in the semester
- C_i = Credits for the subject, i
- GP_i = Grade Point of the subject, i
- TC = Total number of credits in the semester

11.2 Cumulative Grade Point Average (CGPA)

The CGPA is computed for every student at the end of each semester. The CGPA would give the cumulative performance of a student from the first year up to the end of the semester to which it refers and is calculated as follows:

$$CGPA = \frac{\sum_1^m (GPA_j)(TC_j)}{\sum_1^m TC_j}$$

Where

- m = Number of semesters under consideration
- TC_j = Total number of credits for a particular semester, j
- GPA_j = The grade point average of that semester, j

Both SGPA and CGPA will be rounded off to the second place after the decimal and recorded as such. While computing SGPA / CGPA, the course in which the candidate is awarded zero grade points will also be included.

11.3 CGPA to Percentage conversion:

CGPA to equivalent percentage conversion is as follows.

$$\text{Equivalent Percentage} = (CGPA - 0.50) \times 10$$

12. Award of Class

12.1 After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of B.Tech. degree, he / she shall be placed in one of the following four classes.

Class Awarded	CGPA Secured
First Class with Distinction	≥ 7.5
First Class	$\geq 6.5 < 7.5$
Second Class	$\geq 5.5 < 6.5$
Pass Class	$\geq 4.5 < 5.5$

12.2 Note: * Students who have written supplementary examinations to fulfil the credit requirement will not be awarded First Class with Distinction. For such students the highest degree that is awarded will be First Class Only.

12.3 Grade Sheet

The grade sheet (memorandum) will be issued to each student indicating his performance in all the courses taken in that semester in the form of grades, also indicating the SGPA of that semester.

13 Withholding of results

If any case of indiscipline / malpractice is pending against him/her, the result of the student will be withheld and he/she will not be allowed into the next semester and his/her degree will be withheld in such cases.

14. Attendance Requirements

14.1 A student shall be eligible to appear for the end semester examinations if he / she acquires a minimum of 75% of attendance in aggregate of all the subjects along with a minimum of 40% attendance in each course / subject in a semester.

14.2 Condonation of shortage of attendance may be recommended provided a student puts in at least 65% attendance in aggregate of all the subjects along with a minimum of 40% attendance in each course in a semester. For condonation of shortage of attendance, the student shall pay the prescribed fee and submit an application in writing clearly stating the reason for shortage of attendance along with necessary

documentary evidence. The final decision for condonation of attendance shall be taken by the college academic committee considering the merits of the case.

14.3 Students whose shortage of attendance is not condoned in any semester are not eligible to register for the end semester examinations and shall have to repeat that semester.

14.4 A student, who has satisfied the minimum attendance requirements in any semester, may repeat that semester with the permission of the Principal / Director and cancelling the record of attendance and sessional marks of that semester. A student who gets detained in any even semester may rejoin the odd semester of that particular academic year with the permission of the Principal / Director and cancelling the previous record of sessional and end semester marks of that odd semester.

14.5 A student is required to complete the course of study of regular B.Tech. program, satisfying all the attendance requirements in all the four years of the program within a period of eight academic years from the year of admission, failing which he/she shall forfeit his/her admission.

A student is required to complete the course of study of B. Tech. program under lateral entry scheme, satisfying all the attendance requirements in all the three years of the program within a period of six academic years from the year of admission, failing which he/she shall forfeit his/her admission.

15. Promotion Rules

15.1 A student shall be eligible for promotion to the next semester if he / she satisfies the minimum attendance requirement in the immediately preceding semester as given in clause 14.

15.2 A student shall be promoted from IV to V Semester, only if he/she fulfils the academic requirement of securing 40% of the credits (any decimal fraction should be rounded off to higher digit) in the subjects that have been studied up to III or IV semester. However, this will not apply to the lateral entry students.

15.3 A student shall be promoted from VI semester to VII semester only if he / she fulfils the academic requirements of securing 40% of the credits (any decimal fraction should be rounded off to higher digit) in the subjects that have been studied up to V or VI semester. This applies to lateral entry students also.

In case a student is detained for want of credits for a particular academic year, the student may make up the credits through supplementary examinations and only after securing the required credits he/she shall be permitted to join in the V semester or VII semester respectively as the case may be.

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

16. Award of B.Tech. Degree

16.1 A student who is admitted into I B. Tech will be declared eligible for the award of the B. Tech degree / B.Tech Degree with a Minor if he/she fulfills the following requirements.

- (i) Pursues a course of study in not less than four academic years and not more than eight academic years.**
- (ii) Registers for 160 credits and secures all the 160 credits.**

16.2 A student who is admitted into II B. Tech under LES will be declared eligible for the award of the B. Tech degree / B.Tech Degree with a Minor if he/she fulfills the following requirements.

- (i) Pursues a course of study for not less than three academic years and not more than six academic years.**
- (ii) Registers for 120 credits and secures all the 120 credits.**

17. 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.
- (iii) 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 can complete the requirement for Minor within the 160 credits by opting or the courses offered through various verticals/tracks under Open Electives.

18. 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., 160 credits).

- (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

18.1 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.
- (v) Honors is to be completed simultaneously with a Major degree program.

18.2 Registration for Honors:

- (i) 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.
- (ii) 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.

- (iii) 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.
- (iv) There is no fee for registration of subjects for Honors program offered in offline at the respective institutions.

19. Award of Rank

19.1 Ranks shall be awarded in each branch of specialization for the top three students.

19.2 Only such candidates who complete the regular B.Tech. programme within four academic years or B. Tech. programme under lateral entry scheme within three academic years from the year of their admission are eligible for the award of rank.

19.3 For the purpose of awarding rank in each branch, total marks, i.e. end examination and sessional marks put together of all the semesters of II, III and IV B. Tech. secured in the first attempt only shall be taken into account. Candidates who have failed in any course in any semester are not eligible for the award of Rank.

20. Multiple Entry / Exit Option

20.1 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.

a) Entry Policy:

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

Note: The Institute 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 the University, UGC, AICTE and State government.

21. Gap - Year

Students who wish to pursue entrepreneurship as a career are allowed to take a break of one year at any time after 2nd year to pursue full time entrepreneurship program / to establish startups. 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. An evaluation committee shall be constituted to evaluate the proposal submitted by the student and the committee shall decide on permitting the student for having the Gap Year and the duration of completion of B. Tech. degree course.

22. Transitory Regulations

Discontinued, detained, or failed candidates are eligible for readmission as and when the semester is offered after fulfilment of academic regulations. Candidates who have been detained for want of attendance or not fulfilled academic requirements or who have failed after having undergone the course in earlier regulations or have discontinued and wish to continue the course are eligible for admission into the unfinished semester from the date of commencement of class work with the same or

equivalent subjects as and when subjects are offered. They will follow the academic regulations into which they are readmitted.

Candidates who are permitted to avail Gap Year shall be eligible for re-joining into the succeeding year of their B. Tech from the date of commencement of class work, They will follow the academic regulations into which they are readmitted.

23. Student Transfers:

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

24. Amendment of Regulations

N.B.K.R. Institute of Science & Technology reserves the right to amend these regulations at any time in future without any notice. Further, the interpretation of any of the clauses of these regulations rests with the standing committee and the decision shall be reported to the Academic Council.

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