

Swami Keshvanand Institute of Technology, Management & Gramothan
(An Autonomous Institute Affiliated to Rajasthan Technical University, Kota)
Ramnagar, Jagatpura, Jaipur-302017, India

2. TEACHING & EXAMINATION SCHEME FOR UNDERGRADUATE DEGREE (B.TECH.) PROGRAM

2.1 Structure of Undergraduate Engineering & Technology (B.Tech.) Program

Sr. No.	Category	Abbreviation	Credits
Institute Core			
1	Humanities and Social Sciences including Management courses	HSMC	9
2	Basic Science courses	BSC	24
3	Engineering Science courses including workshop, drawing, basics of electrical / mechanical / computer etc.	ESC	24
Departmental Core			
4	Program Core courses	PCC	65
5	Project Work / Seminar	PSIT	12
Departmental Electives			
6	Program Elective courses relevant to chosen specialization / branch	PEC	15
7	Open Elective courses - Electives from other technical and /or emerging subjects (<i>Interdisciplinary Subject</i>)	OEC	9
8	Industrial Trainings: Internship in industry or elsewhere	PSIT	05
9	Social Outreach, Discipline & Extra Curricular Activities	SODECA	3
10	Mandatory Courses (<i>Non-Graded units</i>)	MC	11 [#]
Total Credits required for the award of B.Tech. Degree			166+11[#]

**A student must earn these 11 Non-graded units over the complete duration of the program.*

2.2 Credits Required for Awarding Degree

Sr. No.	Degree	Required Credits	Non-Graded Units [#]
1	B.Tech.	166	11
2	B.Tech. (Honours)	166+20*	11
3	B.Tech with Minor Engineering	166+20**	11

**A student must earn 11 Non-graded units over the complete duration of the program.*

**20 credits which could be acquired through MOOCs out of which not less than 10 credits should be related to Departmental Specialization. (Annexure-1)*

***20 credits by open electives related to minor specialization offered by the host department in the institute as well as from the MOOCs platform. (Annexure-2)*

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2.3 General Rules for Credits:-

- 2.3.1 Total **125 Credits** will be required for a student to be eligible to get Undergraduate Degree in Engineering & Technology admitted through Lateral Entry.
- 2.3.2 A student will be eligible to get B. Tech. (Honours) Degree, if he/she completes an additional 20 credits. These 20 credits could be acquired through MOOCs.
- 2.3.3 A Student will be eligible to get B.Tech. degree with minor engineering, if he/she completes an additional 20 credits. These 20 credits related to minor engineering are to be earned from the courses offered by the host department in the institute as well as from the MOOCs platform. **(Annexure-2)**
- 2.3.4 In addition to the above mentioned credits student must earn 11 Non-graded units over the complete duration of the program.

2.4 Definition of the Course Code

Every course is assigned with a code apart from title and scheme. The course code would contain four letters followed by three digits.

< **XX** > < **Y** > < **Z** > < **N₁** > < **N₂ N₃** >

- **XX:** "Department offering the course" in two-digit alphabets as per the following:

Sr. No.	Department Offering the Course	Code
1	Chemistry	CH
2	Civil Engineering	CE
3	Computer Science and Engineering	CS
4	Computer Science and Engineering (Artificial Intelligence)	CA
5	Computer Science and Engineering(Data Science)	CD
6	Computer Science and Engineering (Internet of Things)	CI
7	Electrical Engineering	EE
8	Electronics and Communication Engineering	EC
9	Humanities & Social Sciences	HS
10	Information Technology	IT
11	Mathematics	MA
12	Management Studies	MS
13	Mechanical Engineering	ME
14	Physics	PH

- **Y:** "Level of Course" (U-undergraduate or P-post graduate)
- **Z:** "Nature of Course" as per the following

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Nature of the course	Code
Social Outreach, Discipline & Extra Curriculum Activities (SODECA)	A
Project based courses (e.g. Major, Minor, Mini Projects)	D
Lecture courses (It also includes all theory courses)	L
Non-graded courses (Mandatory courses)	N
Practical / Practice based courses	P
Seminar Courses	Q
Professional Practices (for MBA)	R
Independent Study (For MBA)	S
Industrial Training/Internship	T

- N_1 : Semester under which the course is running
- N_2N_3 : Two digit numeric as per the course details.

Illustrate:

For undergraduate program (B.Tech.) table for N_2N_3 is given below:

Sr. No.	Course Detail	Code
1	Social Outreach, Discipline & Extra Curricular Activities (SODECA)	00
2	Program Core Course (Theory) in a semester (PCC)	01-10
3	Program Elective Course (PEC)	11-19
4	Program Core Course (Lab/Practical/Design) in a semester(PCC)	20-29
5	PSIT (Training)	30
6	PSIT (Seminar)	40
7	PSIT (Project)	50
8	Open Elective (OE)	60
9	MOOCs	70
10	Mandatory Courses/Audit Course/Bridge Course (Non Credit)	99

Department Offering the Course: **Electronics & Communication Engineering**

Level of Course: **Undergraduate**

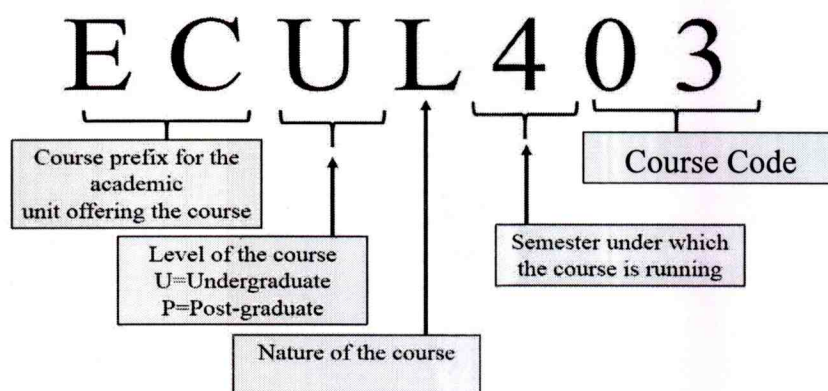
Nature of Course: **Lecture**

Semester under which the course is running: **4th**

Two digit numeric as per the course detail: **03**

Hence the Course Code will be ECUL403

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2.5 B.Tech. Mandatory/Audit Courses (Non-Credit Course)

Sr. No.	Course Title	Course Code	Completion Year	Non-Graded Units
1	Induction Training	NU99.1	1 st Semester	1
2	Environmental Sciences	NU99.2	1 st Year	2
3	Essence of Indian Traditional Knowledge	NU99.3	1 st Year	2
4	Technical Training	NU99.4	2 nd Year	1
5	Skill Development Courses	NU99.5	2 nd Year	1
6	Campus Recruitment Training (CRT)	NU99.6	3 rd Year	2
7	Indian Constitution	NU99.7	3 rd Year	2
Total				11#

A student must earn these 11 Non-graded units over the complete duration of the program.

2.6 Bridge Course

2.6.1 It will be an audit course for all branches of UG engineering & Technology admitted into second year through Lateral Entry in Engineering Program (through Diploma, B.Sc., and D.Voc.)

2.6.2 No marks/grades will be awarded for such courses. But student has to pass these courses in order to bridge subjects such as Programming for Problem

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Solving, Engineering Graphics/Engineering Drawing and Fundamentals of Engineering Mathematics.

S. No.	Course Code	Course Title	Applicable for the LEEP entry students admitted through
1	MABC99.1	Fundamentals of Engineering Mathematics	Diploma and D. Voc. Stream
2	CSBC99.1	Programming for Problem Solving	All (Diploma, B. Sc. Stream and D. Voc. Stream)
3	MEBC99.1	Engineering Graphics/Drawing	Only for B. Sc. Stream

2.7 Semester wise Credit distribution

Semester	Credit								Total
	Theory Course(s)	Lab Course(s)	Training	Seminar	Project	SODECA	PEC	Open Elective	
I	14	5.5	-	-	-	0.5	-	-	20
II	15	5.5	-	-	-	0.5	-	-	21
III	17	6	1	-	-	0.5	-	-	24.5
IV	17	6	-	-	-	0.5	-	-	23.5
V	11	4	2	-	-	0.5	3	3	23.5
VI	8	6	-	-	-	0.5	6	3	23.5
VII	3	4	2	2	2	-	6	3	22
VIII	-	-	-	-	8	-	-	-	8
Total	85	37	5	2	10	3	15	9	166

2.7.1 Industrial Trainings (Mandatory)

S. No.	Duration of Training	Mode of Training	After	Exam Semester	Credit
1	15 Days	In-house/ Industry	I Year (II Semester)	III	1*
2	45 Days	In-house/ Industry	II Year (IV Semester)	V	2
3	45 Days	Industry only	III Year (VI Semester)	VII	2
			Total		5

*The Lateral Entry students may complete their training, during B.Tech. III Semester.

2.7.2 Distribution of Project/Seminar/Industrial Training (PSIT)

PSIT	Credits			Total Credit
	Project	Seminar	Training	
	10	2	5	17

2.8 Continuous Assessment:

Student performance will be continuously assessed in all courses, based on

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class/tutorial participation, assignment work, lab work, class tests, quizzes, in semester and end semester examinations, which contribute to the final grade awarded in the course.

2.8.1 Performance in each theory course of B.Tech will be evaluated out of a given maximum marks, of which 40 % marks are for Continuous In-term Examination (CIE) and 60 % marks for the Semester End Examinations (SEE). The Continuous In-term Examination (CIE) in a theory course is based on In-Semester Examination (ISE) consisting of two mid-terms and Class Work Sessional (CWS). The division of marks will be done as per the following table:

Nature of Examination			Individual weightage	Relative weightage
Semester End Examinations (SEE)			60	60
Continuous In-term Examination (CIE)	ISE	In-Semester Examinations (Two)	20	40
	Class Work Sessional (CWS)	Online Quiz/Class Test (Two)	10	
		Assignments/ Seminar/ Case presentations	10	
Total Marks				100

2.8.2 Performance in practical courses will be evaluated out of a given maximum marks of which 60 % marks are based on Continuous In-term Examination (CIE) consisting of two mid-terms and 40 % marks are based on the Semester End Examinations (SEE). The division of marks will be as per the following table:

Nature of Examination			Individual Weightage
Semester End Examinations (SEE) (40%)			40
Continuous In-term Examination (CIE) (60%)	IPE (36%)	In-Semester Practical Examination (IPE) (Two)	36
	Practical Sessional (PRS) (24%)	Performance in Conduct of Lab Experiment During Semester	12
		Quality of Lab Records	6
		Attendance and Punctuality in submission of lab records	6
Total			100

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2.9 Question Paper Pattern

- 2.9.1 Course outcome (s) (COs) and Bloom's level (BL) should be mentioned against each question in the paper.
- 2.9.2 Question paper will consists of three parts namely Part-A, Part-B and Part-C.
- 2.9.3 Questions of Part-B and Part-C may have subdivisions.
- 2.9.4 No internal choice should be given in Part-A and Part-B of question paper. There may be an internal choice in Part-C provided both questions address the same CO and same BL of the respective course.
- 2.9.5 The recommended marks distribution for questions of different difficulty level in order to test all levels of cognitive skills should be as mentioned below:

Recommended marks distribution	Remembrance and understanding level	Application and analysis level	Evaluation and creation level
	25-30%	35-45%	15-20%

2.10 In-Semester Examination (ISE): Theory Paper Pattern

Exam Duration	Part	Marks Distribution (40)	
2 Hours	A	4/4	4x2=8
	B	2/2	2x6=12
	C	2/3	2x10=20
Total Marks (Question Paper)			40
In Semester Examination (ISE) Max. Marks			20

2.11 Semester End Examinations (SEE): Theory Paper Pattern

Exam Duration	Part	Marks Distribution (60)	
3 Hours	A	6/6	6x2=12
	B	3/3	3x6 =18
	C	3/4	3x10=30
Total Marks (Question Paper)			60
Semester End Examination (ISE) Max. Marks			60

PART A: Short answer questions (up to 25 words).

PART B: Analytical/Problem Solving questions.

PART C: Descriptive/ Analytical/Problem solving/Design questions.

2.12 Duration of Program:-

The maximum time allowed for a student to complete the degree requirement

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in any program will be twice the actual duration of the program. (i.e. for B.Tech, the maximum duration will be $4 \times 2 = 8$ years).

2.13 Registration

Each student has to register for the Professional Core Courses (PCC), Professional Elective Courses (PEC) of his/her program with the parent department along with Open Elective Courses (OEC) as per the teaching scheme at the commencement of the semester.

2.14 Promotion to Higher Semesters:

Promotion from an even semester to the next higher odd semester is subject to the minimum academic performance requirements as stated below.

2.14.1 To be eligible for promotion to the third semester, a student should have earned minimum 50% of the total credits cumulative up to 2nd semester.

2.14.2 To be eligible for promotion to the fifth semester, a student should have earned a minimum 50% of the total credits cumulative up to 4th semester.

2.14.3 To be eligible for promotion to seventh semester of a four year program, a student should have earned minimum 50% of the total credits cumulative up to 6th semester.

2.14.4 If 50% of the total credit is not a whole number, the integer portion before the decimal point will be considered.

2.15 Tentative Schedule for the Conduction of SEE:

- a. SEE (Main/Back) at the end of the ODD semester –tentatively during Nov / Dec.
- b. Make –Up Examination (ODD).
- c. SEE (Main/Back) at the end of the EVEN semester – tentatively during April - June.
- d. Make –Up Examination (EVEN) – conducted after the Summer Term.

2.16 Appointment of Examiners for SEE:

2.16.1 Examiners and/or moderators for SEE shall be appointed by the COE on the recommendation of the Head of the concerned department/ DPAQIC concerned

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for the selection of examiners.

2.16.2 For each question paper of a course of study three paper setters preferably 50% of the total examiners from outside of the institute shall be appointed on terms, conditions and instructions determined by the controller of Examination of the institute in prescribed format.

2.17 Grading & Pass rules for B.Tech degree.

2.17.1 The Relative grading system will be followed when the number of students in a course is more than 30 and absolute grading otherwise. Grades are calculated based on the mean (\bar{x}) and standard deviation (σ) of the total marks (m) secured by the student in each course. Marks obtained in the in-semester and end-semester examinations are added together and a 10-point grading system is used to award the student with an overall letter grade for the course.

2.17.2 Structure for Grading of Academic Performance:

Letter Grade	Numerical Grade	Formula	Computation of Grade Cut Off
O (Outstanding)	10	$m \geq \bar{x} + 1.5\sigma$	The value of $\bar{x} + 1.5\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} + 1.5\sigma$ or 91% whichever is lower.
A+ (Excellent)	9	$\bar{x} + 1.0\sigma \leq m < \bar{x} + 1.5\sigma$	The value of $\bar{x} + 1.0\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} + 1.0\sigma$ or 82% whichever is lower.
A (Very Good)	8	$\bar{x} + 0.5\sigma \leq m < \bar{x} + 1.0\sigma$	The value of $\bar{x} + 0.5\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} + 0.5\sigma$ or 73% whichever is lower.
B+ (Good)	7	$\bar{x} + 0.0\sigma \leq m < \bar{x} + 0.5\sigma$	The value of $\bar{x} + 0.0\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} + 0.0\sigma$ or 64% whichever is lower.
B (Above Average)	6	$\bar{x} - 0.5\sigma \leq m < \bar{x} + 0.0\sigma$	The value of $\bar{x} + 0.5\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} - 0.5\sigma$ or 55% whichever is lower.
C (Average)	5	$\bar{x} - 1.0\sigma \leq m < \bar{x} - 0.5\sigma$	The value of $\bar{x} - 1.0\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} - 1.0\sigma$ or 46% whichever is lower.
P (Pass)	4	$\bar{x} - 1.5\sigma \leq m < \bar{x} - 1.0\sigma$	The value of $\bar{x} - 1.5\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} - 1.5\sigma$ subject to the condition of being minimum 35%.

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F (Fail)	0	$m < \bar{x} - 1.5\sigma$	Less than $\bar{x} - 1.5\sigma$ or 35% whichever is lower
I	-	Incomplete	-
NA	-	Not Allowed	-
NP	-	Audit Pass	-
NF	-	Audit Fail	-

2.17.3 In those subjects, where the total number of students is up to 30, the results in Grades shall be prepared on the basis of the actual performance of the students in the percentage scale and not on the basis of the formula approved for computational of grades i.e. absolute grading system shall be implemented.

2.17.4 A Student will be declared 'Pass' in a course only if he/she has secured at least 35% marks in Semester End Examination (SEE) separately and 35% marks in aggregate of Continuous In-term Examination (CIE) and Semester End Examination (SEE). Less than 35% marks in Semester End Examination (SEE) shall not be considered for above mentioned computation.

2.17.5 Student must obtain at least grade P in each theory and practical in order to declared 'Pass' in the respective course.

2.17.6 The Student will be given a grade "F" if he/she fails to obtain minimum 35% marks in the Semester End Examinations (SEE) separately and 35% marks in aggregate of Continuous In-term Examination (CIE) and Semester End Examination (SEE) in any of the theory or practical courses. He/she will be required to appear in the subsequent back examinations. In such a case Student may opt either of the following options:-

- Wish to carry forward the previous marks of internal assessment.
- Wish to appear in the internal assessment for improvement.

2.17.7 Rules for Grace Marks: If there is no grade moderation, Grace Marks may be awarded as per the university rules.

2.17.8 Evaluated answer sheets may be shared with students to address grievances if any. Departmental Program Assessment and Quality Improvement Cell (DPAQIC) shall be authorized to recommend correction in the evaluated answer sheet. This exercise should be completed within seven days after the results are announced.

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2.17.9 The mark-sheet will contain the Grade, SGPA and CGPA along with the important rules related to CBCS system.

2.17.10 Description of Grades

A. Incomplete Grade: 'I'

The guidelines for the award of 'I' grade are as follows:

- a. In case of absence on medical grounds or other special circumstances, before or during the Semester End Examination (SEE), the student can apply for 'I' grade provided that he/she has not been disqualified due to shortage of attendance. An application requesting 'I' grade should be made at the earliest but not later than the last day of Semester End Examination (SEE). OSA, Course Coordinator and Head of respective department will verify the attendance requirement and the genuineness of the medical emergency or special circumstances. Finally on the recommendation of the OSA, Course Coordinator and Head of respective department, 'I' grade will be awarded. In such course(s), student must appear in the very next Make-up Examination to convert 'I' grade into regular grade otherwise 'I' grade will automatically converted into 'F' grade.
- b. The Head of respective department will forward his/her recommendation for awarding 'I' grade to the COE.
- c. The 'I' grade shall be converted into a proper letter grade after makeup examination is over and the requirements of the course are completed. Any 'I' grade still outstanding two days after the last scheduled date, shall be automatically converted into 'F' grade.
- d. If a student is unable to take a make-up examination, the 'I' grade shall be automatically converted into 'F' grade.
- e. An 'I' grade may be given for project in case of medical emergency only. The 'I' grade for incomplete project work will be converted into a regular grade on the completion of the project work and its evaluation within 4 weeks.

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B. Not Allowed grade: 'NA'

The not allowed grade (NA) shall be awarded if the student is not permitted to appear in examination due to poor attendance.

C. Audit Pass/Audit Fail grade : 'NP' / 'NF'

- a. The audit pass (NP) grade is awarded if he/she has obtained at least 'P' grade or obtained NPTEL certificate or equivalent in that particular audit course. If the stipulated requirements are not fulfilled, the audit fail (NF) grade is awarded. The grades obtained in an audit course are not considered in the calculation of SGPA/CGPA.
- b. Auditing a course is allowed till last date as stipulated in the semester schedule.

2.18 Course Re-Registration

2.18.1 A student who does not satisfy the minimum criteria for passing the course is allowed to improve either or both ISE, SEE components. Such students can register for BACK Examination in the failed courses (odd semester subjects during the odd semester and even semester courses during the even semester) to satisfy the minimum criterion for passing the course. However such students can also register FOR BACK Examination along with Make-Up examination.

2.18.2 A student may register for Back (Improvement) Mid Term Examination(s), along with Semester End Examination (SEE) of that theory course again and if failed in earlier examination. In such a case the marks secured by him/her in that theory paper in previous term test shall automatically stand cancelled. The marks of the latest examinations shall only be considered for working out the result. If such a student remains absent from the Examination after registration then he/she shall be treated as absent.

2.18.3 **Sessional Improvement:** If the student is failing in any practical and sessional course, he/she can make improvement in the sessional component, if the earlier marks in the sessional component are less than 40%. The student will be required to register in both practical and sessional components of the course and his/her earlier marks will automatically stand cancelled. The marks of the latest examinations shall be considered for working out the result. If such a

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student remains absent from the Examination after registration then he/she shall be treated as absent.

2.18.4 Students shall be permitted to appear only once in midterm/practical & sessional improvement in subsequent year and thereafter there will be no change in his/her midterm/practical & sessional marks.

2.18.5 The applicable fee for back paper examination will have to be paid by the student for each attempt.

2.19 Summer Term**

The Summer Term is compressed semester wherein all the regulations for the normal semester shall apply. It provides an opportunity to the **undergraduate students** -

- a. who have been prevented from appearing in SEE because of their poor attendance due to medical reason or extraordinary circumstances (or)
- b. who have absented themselves from attending SEE (or)
- c. who have been awarded 'I' grade (or)
- d. who have been unsuccessful ('F grade) in attaining the minimum passing standards

***It is entirely up to the institute whether or not to offer the Summer Term.*

2.19.1 Guideline for Summer Term

- a. A student can register in Summer Term following the last working day of regular semester as notified and announced by the institute.
- b. Tuition Fee (in addition to regular semester fee) will be charged by the institute for registration in Summer Term. The requisite fee shall be decided by the institute.
- c. Such courses will begin shortly after the last working day of the semester and would be concluded within 30 day inclusive of evaluation process.
- d. The student has to maintain attendance in Summer Term to become eligible for appearing in ISE/SEE.
- e. The classes for the course running in Summer Term may be held online/Offline as per the convenience of the respective HoD & Course Coordinator.
- f. The registration shall be possible only when the particular course is offered in

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Summer Term. The final list of eligible courses for summer term will be notified after the registration process.

- g. A student can register for a maximum of 14 credits and not exceeding 3 (Three) theory and 2 (two) laboratory courses in a Summer Term.
- h. *Those students who have been prevented to appear in SEE in any or all the courses of the regular semester due to poor attendance are required to enroll in Summer Term following the conditions mentioned above.*

2.20 Semester Grade Point Average (SGPA) & Cumulative Grade Point Average (CGPA)

- a. The overall performance of a student will be indicated by two indices: Semester Grade Point Average (SGPA) & Cumulative Grade Point Average (CGPA).
- b. SGPA is the weighted average of the grades obtained in a semester while CGPA is the weighted average of the grades upto and including any semester.
- c. After the results are declared, grade cards will be issued to each student, which will contain the list of courses for that semester and grades obtained by the student, SGPA of that semester.
- d. Semester wise SGPA :

The 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. While calculating SGPA, the grade point, lower than 'P' in a course shall not be taken into account.

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

Where,

c_i = Number of credits of the i^{th} course

g_i = Grade point scored by the student in the i^{th} course.

$i = 1, 2, \dots, n$ represents the number of courses in which a student is registered.

D. Semester wise CGPA :

The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a program, i.e.

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$$CGPA = \frac{\sum_{i=1}^m C_i \times S_i}{\sum_{i=1}^m C_i}$$

Where,

S_i = SGPA of the i^{th} semester

C_i = Total number of credits in i^{th} semester

$i = 1, 2, \dots, m$ represents the number of semesters.

- e. The SGPA/CGPA shall be awarded in each semester.
- f. SGPA/CGPA shall be rounded off to two decimal digits on higher side.
- g. Final course merit will be decided on the basis of the absolute marks obtained by an individual student
- h. Conversion of percentage to CGPA

Equivalent Percentage = 10 x CGPA

Award of Division: the division of the student shall be awarded in the following manner (subject to the passing of all the semester courses):

1	$CGPA \geq 7$	1 st Division with Distinction
2	$6 \leq CGPA < 7$	1 st Division
3	$5 \leq CGPA < 6$	2 nd Division
4	$4 \leq CGPA < 5$	Pass

Illustration of computation of SGPA and CGPA

a. Computation of SGPA

Course	Credit	Grade Letter	Grade Point	Credit Point (Credit x Grade Point)
Course -1	3	A+	9	3 x 9=27
Course -2	4	B+	7	4 x 7=28
Course -3	3	B	6	3 x 6=18
Course -4	3	O	10	3 x 10=30
Course -5	3	A	8	3 x 8=24
Course -6	4	O	10	4 x 10=40
Total	20			167

Thus, $SGPA = 167/20 = 8.35$

b. Computation of CGPA

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Semester	I	II	III	IV	V	VI
Credit	20.5	20.5	23.5	23.5	23.5	23.5
SGPA	8.35	7.80	5.60	6.00	6.30	8.00

Thus CGPA up to VI Semester:

$$= \frac{(20.5 * 8.35) + (20.5 * 7.80) + (23.5 * 5.6) + (23.5 * 6.00) + (23.5 * 6.30) + (23.5 * 8.00)}{135}$$

= 6.96

2.21 Change of Branch

2.21.1 A student would be able to change his/her branch of study in UG program in the third semester based on the result of the first and second semester. His / her registration in third semester would be in the changed branch under changed enrolment number and his/her earned credits would be accounted in the database under the new enrolment.

2.21.2 The change in branch would be performed subject to availability of vacant seats in the destination branch & with minimum CGPA of 6.75 up to second semester.

2.21.3 Change of the discipline will be permitted strictly in the order of merit as determined by their CGPA up to second semester, subject to the limitation that the actual number of students in the third semester in the destination branch does not exceed the sanctioned strength and the strength of branch from which transfer is being sought does not fall below 75% of existing strength (enrolled students).

2.22 Extra Mid-Term Examination

2.22.1 A student who has not been allowed due to shortage of attendance to appear in first midterm examination but attains a minimum required attendance from the beginning of the semester to the end of the semester may be allowed to appear in the extra midterm examination.

2.22.2 A student who has been permitted in Mid-Term Examination but could not write the examination (one or more papers) due to medical reasons may be allowed to appear in extra midterm examination provided he/she has submitted medical certificate to the principal at the time of medical

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contingency. The request should be supported with a medical certificate from a registered medical practitioner.

2.22.3 Extra Mid-Term Examinations may be conducted along with Semester End Examinations (SEE) or Make-Up Examination.

2.22.4 Extra Mid-Term Examination shall be conducted against first Mid-Term Examination only.

2.22.5 The Institute may charge fee from the students who are permitted to appear in Extra Mid-Term Examination

2.23 Attendance

2.23.1 Students are expected to attend every lecture, tutorial and practical class scheduled for them. Attendance will be recorded for every class in every course they attend and displayed in the ERP during the semester.

2.23.2 A student with less than 75% attendance in individual courses shall not be permitted to write the examination in that course. Such students are required to register themselves for Summer Term.

2.23.3 Any relaxation in the minimum percentage of attendance shall be as per RTU exam regulation.

2.23.4 The Office of Student Affairs (OSA) will monitor student attendance and provide regular updates to students and their parents. All Student Batch Counselors and Chief Counselors will provide assistance to OSA.

2.23.5 The names of the students whose attendance is less than 75% in the classes held in a course will be intimated by the respective batch counselor to OSA on specified date. These students shall not be allowed to appear in examination of that course and shall be awarded the grade 'NA' irrespective of their performance in Class Work Sessional (CWS) /In-Semester Examination (ISE). The list of such students shall be forwarded by Head, OSA and HoD to examination cell before the commencement of exams.

2.23.6 A student must inform to the respective batch counselor immediately of any instance of continuous absence from classes.

2.23.7 The course coordinator will schedule make-up classes for students having poor attendance due to illness or some extraordinary circumstances.

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2.23.8 In case of absence on medical grounds or other special circumstances, before or during the Semester End Examination (SEE), the student can apply for 'I' grade. At least 75% attendance in a course is necessary for being eligible for request of 'I' grade. An application requesting 'I' grade should be made at the earliest but not later than the last day of Semester End Examination (SEE). OSA, Course Coordinator and Head of respective department will verify the attendance requirement and the genuineness of the medical emergency or special circumstances. Finally on the recommendation of the OSA, Course Coordinator and Head of respective department, 'I' grade will be awarded. In such course(s), student must appear in the very next Make-up Examination to convert 'I' grade into regular grade otherwise 'I' grade will automatically converted into 'F' grade.

2.24 Conduction of Examination

The rules & regulations for the conduction of examinations shall be as per the **REGULATIONS, UNIVERSITY EXAMINATIONS, RAJASTHAN TECHNICAL UNIVERSITY KOTA.**

2.25 Registration


The student must register by the last date as specified in the institute's academic calendar. If they do not register by last date for registration, it is presumed that a student has discontinued their studies and their name will be struck-off from the rolls for that semester.

All registered students are considered as full-time students at the institute. They are expected to be present at the institute and devote full time to academics and co-curricular and extra-curricular activities on the campus.

2.26 Minimum Number of Students for an Elective Course

Department will float two types of elective courses viz. Program Elective Courses (PEC) and Open Elective Courses (OEC). For a PEC a minimum of 20 or actual number of students admitted in the program and for an OEC a minimum of 60 students must register.

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2.27 Withdrawal from Semester

- 2.27.1 A student who wants to withdraw from a course shall apply through the Head of the Department concerned (Chairman, BOS) to the Principal, on a prescribed form within one week from the end of the 1st Mid Term examination. If his/ her request for withdrawal is granted, it will be recorded in the registration record of the student and the concerned Course Coordinator will be informed about it.
- 2.27.2 In case a student is unable to attend classes for more than four weeks in a semester he/she may apply to the Principal through Head of the Department concerned (Chairman, BOS), for withdrawal from the semester, which shall mean withdrawal from all the registered courses in the semester. However, such application shall be made, as early as possible and latest before the start of the Semester End Examination. **Partial withdrawal from the semester shall not be allowed.**
- 2.27.3 In case the period of absence on medical grounds is more than twenty working days during the semester, a student may apply for withdrawal from the semester on Medical Grounds, if he/she desires so. The application must be made to the Principal through Head of the Department concerned (Chairman, BOS), as early as possible and latest before the beginning of Semester End Examination.
- 2.27.4 Any application on medical grounds shall be accompanied with a medical certificate from a Registered Medical Practitioner containing the registration number.
- 2.27.5 A student rusticated or suspended or debarred from the classes by the institute due to any reason whatsoever or having withdrawn from a semester/ year on medical grounds, shall have to meet the requirement of 75% attendance in each course in a semester and shall have to complete the program within its maximum time limit of eight years for Four Year UG program as specified in Regulations excluding the period of expulsion, if any.

2.28 Termination of Enrolment

- 2.28.1 If a student registered in the First Year of the Program is continuously absent from the classes for more than four weeks without informing the Course

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Coordinators, the Coordinator shall immediately bring it to the notice of Head of Department for informing the Principal. The names of such students shall be removed from the institute rolls and such absence during First Year will render the student ineligible for re-admission in current semester.

2.28.2 The duration of the B. Tech. program is 4 years i.e. 8 semesters. The enrolment of a student will stand cancelled at the end of 8 years from the date of initial registration in the first semester.

2.29 Project allotment and Evaluation Guidelines

The process of Project allotment will be completed in the beginning of VI semester and the evaluation will be carried out in VII and VIII Semester as per the teaching and examination scheme.

2.29.1 Guidelines for Project Identification: Two main criteria that must drive a project proposal are:

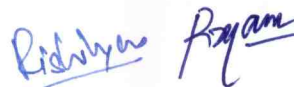
- Feasibility of the project (time, supervision, cost implication, availability of equipment and literature)
- It should satisfy course outcomes, POs and PSOs of this course. All the projects for B. Tech. should be formulated in such a way that after completion of the project, course outcomes are realized.

2.29.2 Guidelines for Project Allotment:

- a. To administer and allocate project to students, Project Coordinators are appointed by Head of the Department.
- b. All the faculty members and students are required to submit at least two different projects to the HoD according to their areas of interest.
- c. Submitted project proposals are checked and approved by the HoD and Project Coordinators.
- d. The number of projects allocated to any faculty of the Department shall be limited to two.
- e. The students are given choice to list 3 projects in order of priority and to submit their choices to the Project Coordinator in the beginning of VI semester.







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- f. Based on students' choices, the projects are allocated by the Project Coordinators.
- g. If no choice is received, HoD may allocate the available project to the student.
- 2.29.3 The evaluation will be based upon Continuous In-term Examination (CIE) and Semester End-Examination (SEE).
- 2.29.4 The End Term Project Examination will be carried out at the end of 7th and 8th semester within 10 days from the last theory paper.
- 2.29.5 A final project report must be submitted to the Project Coordinator at least three days before the final project examination.
- 2.29.6 Depending on the project, the final examination may involve a presentation and viva-voce.
- 2.29.7 A student can opt project work in industry/research lab/any such organization outside or within the institute.

2.30 Evaluation of Industrial Training

2.30.1 Internal Assessment- 60%

- Industrial visit- 20%
- Practical Training report with certificate- 20%
- Practical Training presentation- 10%
- Attendance in class during presentations- 10%

2.30.2 External Assessment- 40%

- Viva- 20%
- Quiz- 20%

2.31 Social Outreach, Discipline & Extra Curriculum Activities (SODECA)

Students will be required to earn 3 credits from SODECA activities apart from normal teaching schedule. A student will be awarded 0.5 Credit in a semester for completing the activity successfully.

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