

**VELAGAPUDI RAMAKRISHNA  
SIDDHARTHA ENGINEERING COLLEGE  
(AUTONOMOUS)**

(Approved by AICTE, Autonomous, Accredited by NAAC at "A+" Grade & ISO 21001:2018 Certified, Affiliated to JNTUK)

**Vijayawada – 520 007**



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**ACADEMIC REGULATIONS  
B.TECH. DEGREE PROGRAMS**

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**VR23**

## CURRICULUM STRUCTURE FOR B.Tech. UG PROGRAMS

### INDUCTION PROGRAMME

S.No.	Course Name	Category	L-T-P-C
1	Physical Activities -- Sports, Yoga and Meditation, Plantation	MC	0-0-6-0
2	Career Counselling	MC	2-0-2-0
3	Orientation to all branches -- career options, tools,etc.	MC	3-0-0-0
4	Orientation on admitted Branch -- corresponding labs, tools and platforms	EC	2-0-3-0
5	Proficiency Modules & Productivity Tools	ES	2-1-2-0
6	Assessment on basic aptitude and mathematical skills	MC	2-0-3-0
7	Remedial Training in Foundation Courses	MC	2-1-2-0
8	Human Values & Professional Ethics	MC	3-0-0-0
9	Communication Skills -- focus on Listening, Speaking, Reading, Writing skills	BS	2-1-2-0
10	Concepts of Programming	ES	2-0-2-0

**B.Tech. – I Year I Semester**

S.No.	Category	Title	L/D	T	P	Credits
1	BS&H	Basic Sciences and Humanities Course	2	0	0	2
2	BS&H	Basic Sciences and Humanities Course	3	0	0	3
3	BS&H	Basic Sciences and Humanities Course	3	0	0	3
4	ES	Engineering Science Course	3	0	0	3
5	ES	Introduction to Programming	3	0	0	3
6	BS&H	Basic Sciences and Humanities Course Lab	0	0	2	1
7	BS&H	Basic Sciences and Humanities Course Lab	0	0	2	1
8	ES	Engineering Lab	0	0	3	1.5
9	ES	Engineering Science Lab	0	0	3	1.5
10	BS&H	Health and wellness, Yoga and Sports	-	-	1	0.5
<b>Total</b>			<b>14</b>	<b>00</b>	<b>11</b>	<b>19.5</b>

**B.Tech. – I Year II Semester**

S.No.	Category	Title	L/D	T	P	Credits
1	BS&H	Basic Sciences and Humanities Course	3	0	0	3
2	BS&H	Basic Sciences and Humanities Course	3	0	0	3
3	ES	Engineering Science Course	3	0	0	3
4	PC	Professional Core Course	3	0	0	3
5	ES	Engineering Science Course	1	0	4	3
6	ES	Engineering Science Lab	0	0	2	1
7	BS&H	Engineering Physics Lab	0	0	2	1
8	ES	Engineering Science Lab	0	0	3	1.5
9	PC	Professional Core Lab	0	0	3	1.5
10	BS&H	NSS/NCC/Scouts & Guides/ Community Service	-	-	1	0.5
11	BS&H	Introduction to Design Thinking	2	0	0	-
<b>Total</b>			<b>13</b>	<b>00</b>	<b>15</b>	<b>20.5</b>

**B.Tech. – II Year I Semester**

S.No	Category	Title	L/D	T	P	Credits
1	BS&H	Engineering Mathematics (Branch specific)	3	0	0	3
2	BS&H	Universal Human Values Understanding Harmony	2	1	0	3
3	Engineering Science		2	0	0	2
4	Professional Core		3	0	0	3
5	Professional Core		3	0	0	3
6	Engineering Science		0	0	2	1
7	Professional Core		0	0	3	1.5
8	Professional Core		0	0	3	1.5
9	Skill Enhancement Course		0	1	2	2
10	Audit Course	Environmental Science	2	0	0	-
<b>Total</b>			<b>15</b>	<b>2</b>	<b>10</b>	<b>20</b>

**B.Tech. – II Year II Semester**

S.No.	Category	Title	L/D	T	P	Credits
1	Management Course - I		2	0	0	2
2	Engineering Science		3	0	0	3
3	Professional Core		3	0	0	3
4	Professional Core		3	0	0	3
5	Professional Core		3	0	0	3
6	Professional Core		0	0	2	1
7	Professional Core		0	0	3	1.5
8	Professional Core		0	0	3	1.5
9	Skill Enhancement Course		0	1	2	2
10	BS&H	Design Thinking & Innovation	1	0	2	2
<b>Total</b>			<b>15</b>	<b>1</b>	<b>12</b>	<b>22</b>
Mandatory Community Service Project Internship of 08 weeks duration during summervacation						

**B.Tech. – III Year I Semester**

S.No.	Category	Title	L/D	T	P	Credits
1	Professional Core		3	0	0	3
2	Professional Core		3	0	0	3
3	Professional Elective - I		2	0	0	2
4	Open Elective - I		3	0	0	3
5	Open Elective - II		3	0	0	3
6	Professional Core		0	0	3	1.5
7	Professional Core		0	0	3	1.5
8	Skill Enhancement course		0	1	2	2
9	BS&H	Tinkering Lab	0	0	2	1
10	Evaluation of Community Service Internship		-	-	-	2
<b>Total</b>			<b>14</b>	<b>1</b>	<b>10</b>	<b>22</b>

**B.Tech. – III Year II Semester**

S.No.	Category	Title	L/D	T	P	Credits
1	Professional Core		3	0	0	3
2	Professional Core		3	0	0	3
3	Professional Core		3	0	0	3
4	Professional Elective - II		3	0	0	3
5	Professional Elective - III		2	0	0	2
6	Open Elective - III		3	0	0	3
7	Professional Core		0	0	2	1
8	Professional Core		0	0	2	1
9	Skill Enhancement course		0	1	2	2
10	Audit Course	Technical Paper Writing & IPR	2	0	0	-
<b>Total</b>			<b>19</b>	<b>1</b>	<b>06</b>	<b>21</b>
Mandatory Industry Internship of 08 weeks duration during summer vacation						

**B.Tech. – IV Year I Semester**

S.No.	Category	Title	L/D	T	P	Credits
1	Professional Core		3	0	0	3
2	Professional Core		3	0	0	3
3	Management Course - II		2	0	0	2
4	Professional Elective - IV		3	0	0	3
5	Professional Elective - V		3	0	0	3
6	Open Elective - IV		3	0	0	3
7	Professional Core		0	0	2	1
8	Professional Core		0	0	2	1
9	Skill Enhancement Course		0	1	2	2
10	Audit Course	Constitution of India	2	0	0	-
11	Internship	Evaluation of Industry Internship	-	-	-	2
<b>Total</b>			<b>19</b>	<b>1</b>	<b>06</b>	<b>23</b>

**B.Tech. – IV Year II Semester**

S.No.	Category	Title	L	T	P	Credits
1	Internship & Project Work	Full semester Internship & Project Work	0	0	24	12

**GROUP- A (AI&DS, AI&ML, CSE, IT) (with effect from 2023-24)****SEMESTER I****CONTACT HOURS: 27**

S. No	Course Code	Course Category	Course Name	L	T	P	Credits
1.	23BS1101	Basic Science	Linear Algebra & Calculus	3	0	0	3
2.	23BS1102	Basic Science	Engineering Physics	3	0	0	3
3.	23ES1103A	Engineering Science	Basic Civil and Mechanical Engineering	3	0	0	3
4.	23ES1104	Engineering Science	Introduction to Programming	3	0	0	3
5.	23HS1105	Humanities and Social Science	Communicative English	2	0	0	2
6.	23BS1151	Basic Science	Engineering Physics Lab	0	0	2	1
7.	23ES1152	Engineering Science	Computer Programming Lab	0	0	3	1.5
8.	23HS1153	Humanities and Social Science	Communicative English Lab	0	0	2	1
9.	23ES1154	Engineering Science	Engineering Workshop	0	0	3	1.5
10.	23ES1155	Engineering Science	IT Workshop	0	0	2	1
11.	23BS1156	Basic Science	NSS/NCC/Community Service	-	-	1	0.5
12.	23MC1106	Mandatory Course	Induction Program				
<b>Total</b>				<b>14</b>	<b>0</b>	<b>13</b>	<b>20.5</b>

Category	Credits
Basic Science Courses	$3 + 3 + 1 + 0.5 = 7.5$
Engineering Science Courses	$3 + 3 + 1.5 + 1.5 + 1 = 10$
Humanities and Social Science Courses	$2 + 1 = 3$
Mandatory Courses	0
<b>TOTAL CREDITS</b>	<b>20.5</b>

**SEMESTER II****CONTACT HOURS: 28**

S.No	Course Code	Course Category	Course Name	L	T	P	Credits
1.	23BS2101	Basic Science	Differential Equations & Vector Calculus	3	0	0	3
2.	23BS2102B	Basic Science	Chemistry	3	0	0	3
3.	23ES2103B	Engineering Science	Basic Electrical and Electronics Engineering	3	0	0	3
4.	23PC2104A	Professional Core	Data Structures	3	0	0	3
5.	23ES2105	Engineering Science	Engineering Graphics	1	0	4	3
6.	23BS2151B	Basic Science	Chemistry Lab	0	0	2	1
7.	23PC2152A	Professional Core	Data Structures Lab	0	0	3	1.5
8.	23ES2153	Engineering Science	Basic Electrical and Electronics Workshop	0	0	3	1.5
9.	23BS2154B	Basic Science	Health and wellness, Yoga and Sports	-	-	1	0.5
10.	23MC2106	Mandatory Course	Introduction to Design Thinking	2	0	0	-
<b>Total</b>				<b>15</b>	<b>0</b>	<b>13</b>	<b>19.5</b>

Category	Credits
Basic Science Courses	$3+3+1+0.5 = 7.5$
Engineering Science Courses	$3+3+1.5 = 7.5$
Professional Courses	$3+1.5 = 4.5$
Humanities and Social Science Courses	0
Mandatory Courses	0
<b>TOTAL CREDITS</b>	<b>19.5</b>

VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGES  
SCHEME OF INSTRUCTION FOR FOUR YEAR UG PROGRAMME [VR23]

**GROUP- B (CE, ME, ECE, EEE, EIE)** (with effect from 2023-24)

**SEMESTER I**

**CONTACT HOURS: 26**

S.No	Course Code	Course Category	Course Name	L	T	P	Credits
1.	23BS1101	Basic Science	Linear Algebra & Calculus	3	0	0	3
2.	23BS1102A	Basic Science	Engineering Chemistry (CE,ME)	3	0	0	3
	23BS1102B		Chemistry (ECE, EEE, EIE)				
3.	23ES1103B	Engineering Science	Basic Electrical and Electronics Engineering	3	0	0	3
4.	23ES1104	Engineering Science	Introduction to Programming	3	0	0	3
5.	23ES1105	Engineering Science	Engineering Graphics	1	0	4	3
6.	23BS1151A	Basic Science	Engineering Chemistry Lab (CE,ME)	0	0	2	1
	23BS1151B		Chemistry Lab (ECE, EEE, EIE)				
7.	23ES1152	Engineering Science	Computer Programming Lab	0	0	3	1.5
8.	23ES1153	Engineering Science	Basic Electrical and Electronics Workshop	0	0	3	1.5
9.	23BS1154B	Basic Science	Health and wellness, Yoga and Sports	-	-	1	0.5
<b>Total</b>				<b>13</b>	<b>0</b>	<b>13</b>	<b>19.5</b>
10.	23MC1106	Mandatory Course	Induction Program				

Category	Credits
Basic Science Courses	$3 + 3 + 1 + 0.5 = 7.5$
Engineering Science Courses	$3 + 3 + 3 + 1.5 + 1.5 = 12$
Humanities and Social Science Courses	0
Mandatory Courses	0
<b>TOTAL CREDITS</b>	<b>19.5</b>

**SEMESTER II**

**CONTACT HOURS: 29**

S.No	Course Code	Course Category	Course Name	L	T	P	Credits
1.	23BS2101	Basic Science	Differential Equations & Vector Calculus	3	0	0	3
2.	23BS2102	Basic Science	Engineering Physics	3	0	0	3
3.	23ES2103A	Engineering Science	Basic Civil and Mechanical Engineering	3	0	0	3
4.	23PC2104B	Professional Core	Engineering Mechanics (CE, ME)	3	0	0	3
	23PC2104C		Network Analysis (ECE, EIE)				
	23PC2104D		Electrical Circuit Analysis - I (EEE)				
5.	23HS2105	Basic Science	Communicative English	2	0	0	2
6.	23BS2151	Basic Science	Engineering Physics Lab	0	0	2	1
7.	23PC2152B	Professional Core	Engineering Mechanics & Building Practices (CE)	0	0	3	1.5
	23PC2152C		Network Analysis & Simulation Lab (ECE, EIE)				
	23PC2152D		Electrical Circuit Analysis Lab (EEE)				
	23PC2152E		Engineering Mechanics Lab (ME)				
8.	23HS2153	Basic Science	Communicative English Lab	0	0	2	1
9.	23ES2154	Engineering Science	Engineering Workshop	0	0	3	1.5
10.	23ES2155	Engineering Science	IT Work shop	0	0	2	1
11.	23BS2156	Basic Science	NSS/NCC/Community Service	-	-	1	0.5
12.	23MC2106	Mandatory Course	Introduction to Design Thinking	2	0	0	-
<b>Total</b>				<b>16</b>	<b>0</b>	<b>13</b>	<b>20.5</b>

Category	Credits
Basic Science Courses	$3 + 3 + 1 + 0.5 = 7.5$
Engineering Science Courses	$3 + 1.5 + 1 = 5.5$
Humanities and Social Sciences	$2 + 1 = 3$
Mandatory Courses	0
Professional Core	$3 + 1.5 = 4.5$
<b>TOTAL CREDITS</b>	<b>20.5</b>

## 1. SHORT TITLE AND COMMENCEMENT

- a. The regulations listed under this head are common for all degree level undergraduate programs (B. Tech.) offered by the college with effect from the academic year 2023-24 and they are called as “VR23” regulations.
- b. The regulations here under are subject to amendments as may be made by the Academic Council of the college from time to time, keeping the recommendations of the Board of Studies in view. Any or all such amendments will be effective from such date and to such batches of candidates including those already undergoing the program, as may be decided by the Academic Council.

## 2. DEFINITIONS

- a. “**Commission**” means University Grants Commission (UGC);
- b. “**Council**” means All India Council for Technical Education (AICTE);
- c. “**University**” means Jawaharlal Nehru Technological University Kakinada(JNTUK);
- d. “**College**” means Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada;
- e. An **Academic Program** means any combination of courses and/ or requirements leading to award of a degree.
- f. “**Course**” means a subject either theory or practical identified by its course title and code number which is normally studied in a semester.
- g. “**Degree**” means an academic *degree* conferred by the university upon those who complete the under graduate curriculum.
- h. “**CBCS**” means Choice Based Credit System
- i. “**MOOC**” means Massive Open Online Course
- j. “**Regular Students**” means student enrolled into the four-year program in the first year.
- k. “**Lateral Entry Students**” means students enrolled into the four-year program in the second year.
- l. “**Honors**” an undergraduate bachelor’s degree containing courses of higher standard in a specific domain offered by the same department.
- m. “**Minors**” an undergraduate bachelor’s degree containing courses in a specific domain other than parent department.
- n. “**APSCHE**” means Andhra Pradesh State Council of Higher Education.

### **3. ACADEMIC PROGRAMS**

#### **3.1. Nomenclature of Programs**

The nomenclature and its abbreviation given below shall continue to be used for the Degree programs under the University, as required by the Council and the Commission:

##### **Bachelor of Technology (B. Tech)**

Besides, the name of the specialization is abbreviated in brackets, for example, engineering degree in Mechanical Engineering program is abbreviated as B.Tech (ME).

*Bachelor of Technology (B. Tech.)* degree program offered in:

1. Artificial Intelligence & Data Science (AI & DS)
2. Civil Engineering (CE)
3. Computer Science and Engineering (CSE)
4. Computer Science and Engineering (Artificial Intelligence and Machine Learning)
5. Electronics and Communication Engineering (ECE)
6. Electrical and Electronics Engineering (EEE)
7. Electronics and Instrumentation Engineering (EIE)
8. Information Technology (IT)
9. Mechanical Engineering (ME)

### **4. DURATION OF THE PROGRAM:**

#### **4.1 Normal Duration**

4.1.1. The duration of an academic program shall be four years consisting of eight semesters.

4.1.2. The duration of the program for lateral entry students who are admitted in 2<sup>nd</sup> year shall be three years consisting of six semesters.

#### **4.2 Maximum Duration**

The maximum period which a student can take to complete a full-time academic program shall be double the normal duration of the program, i.e., for regular students it is eight years and for lateral entry students is six years.

#### **4.3 Minimum Duration of a Semester**

Each semester consists of a minimum of 90 instruction days excluding examination days with about minimum 12 and maximum 34 contact hours per week.

### **5. ADMISSION CRITERIA**

The eligibility criteria for admission into UG Engineering programs are as per the norms approved by Government of Andhra Pradesh from time to time.

The sanctioned seats in each program in the college are classified into CATEGORY-A, and CATEGORY-B at 1<sup>st</sup> year level and only CATEGORY-A at Lateral Entry 2<sup>nd</sup> year level.

The percentages of Category-A, Category-B and Lateral Entry Seats are decided from time to time by the Government of Andhra Pradesh.

#### **5.1 Category-A seats**

These seats are filled as per the norms approved by the Government of Andhra Pradesh.

## 5.2 Category-B Seats

These seats are filled by the College as per the norms approved by the Government of Andhra Pradesh.

## 5.3 Category-Lateral Entry Seats

Lateral entry students shall be admitted into the Third semester directly as per the norms approved by Government of Andhra Pradesh.

## 6. GRADE POINTS AND LETTER GRADE FOR A COURSE

**Grading:** After each course is evaluated for 100 marks, the marks obtained will be converted to a corresponding letter grade as given below, depending on the range in which the marks obtained by the student. Grading System for B. Tech. Individual theory/ lab/ project:

**Table: 1 Grading system for B.Tech. Programme**

Theory	Lab/Project	Grade Points	Letter Grade
90% and above	90% and above	10	Ex
80 to < 90%	80 to < 90%	9	A+
70 to < 80%	70 to < 80%	8	A
60 to < 70%	60 to < 70%	7	B
50 to < 60%	55 to < 60%	6	C
40 to < 50%	50 to < 55%	5	D
< 40%	< 50%	0	F (Fail)
ABSENT	ABSENT	0	AB

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

- I. Semester Grade Points Average (SGPA):
- II. The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with the grade points scored in all the courses taken by a student to the sum of the number of credits of all the courses undergone by a student, i.e.  $SGPA = \frac{\sum (C_i \times G_i)}{\sum C_i}$  where,  $C_i$  is the number of credits of the  $i^{\text{th}}$  course and  $G_i$  is the grade point scored in the  $i^{\text{th}}$  course
- III. Cumulative Grade Point Average (CGPA):
- IV. 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 program, i.e.  $CGPA = \frac{\sum (C_i \times S_i)}{\sum C_i}$  where  $S_i$  is the SGPA of the  $i^{\text{th}}$  semester and  $C_i$  is the total number of credits in that semester.
- V. Both SGPA & CGPA shall be rounded off to 2 decimal points and reported in transcripts.
- VI. While computing the SGPA/CGPA, the courses in which the student is awarded Zero grade points will also be included.
- VII. Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale.
- VIII. Letter Grade: It is an index of the performance of students in a said Course Grades are denoted by letters Ex, A+, A, B, C, D and F.

## 6.2 Conversion Formula for CGPA to Marks in Percentage

The approximate equivalence of marks to a given CGPA is calculated by using the formula: Percentage Equivalence of CGPA =  $[\text{CGPA} - 0.75] \times 10$

## 7. CURRICULUM FRAME WORK

### 7.1 General Issues

- i) Curriculum frame work is important in setting the right direction for a degree program as it takes into account the type and quantum of knowledge necessary to be acquired by a student to qualify for the award of degree in his/her chosen branch or specialization.
- ii) Besides, this also helps in assigning the credits for each course, sequencing the courses semester-wise and finally arriving at the total number of courses to be studied and the total number of credits to be earned by a student to fulfil the requirements for conferment of degree.
- iii) Each theory course shall consist of four units.

### 7.2 Curriculum Structure & Course Categories

The curriculum is designed to facilitate CBCS and incorporates courses required to attain the expected knowledge, skills and attitude by the time of graduation as per the needs of the stakeholders. The curriculum structure consists of various course categories (as described in 7.2.1 to 7.2.8) to cover the depth and breadth required for the program and for the attainment of **program outcomes** of the corresponding program.

The college shall invite registration forms from the students at the beginning of the semester for offering program & open elective courses. There shall be a limit on the minimum and maximum number of registrations based on class/section strength.

#### 7.2.1 Institutional Core

Institutional Core consists of the courses required for all UG Engineering Programs offered by the college. The courses offered under this category cover the required knowledge in the following areas:

##### (a) Basic Sciences and Mathematics (BS)

Basic Science courses include Engineering Physics, Chemistry, Engineering Chemistry, Engineering Physics Lab, Engineering Chemistry Lab, Chemistry Lab. NSS/NCC/Community Service, Health and wellness, Yoga and Sports

Mathematics courses include Linear Algebra & Calculus, Differential Equations & Vector Calculus, Laplace Transforms & Integral Calculus, Complex Analysis, Numerical Methods and Probability and Statistics, etc.

##### (b) Humanities and Social Sciences (HS)

Humanities and Social Science Courses include Communicative English and Communicative English Lab, Universal human values, Design Thinking, Innovation and Tinkering Lab, etc.

##### (c) Engineering Sciences (ES)

Engineering Science courses include Basic Civil and Mechanical Engineering, Introduction to Programming, Computer Programming Lab, Engineering Workshop, IT Workshop, Basic Electrical and Electronics Engineering, Engineering Graphics, Basic Electrical and Electronics Workshop, Computer Programming Lab, etc.

#### **(d) Professional Courses (PC)**

Professional Courses include Data Structures, Data Structures Lab, Engineering Mechanics, Network Analysis, Electrical Circuit Analysis – I, Engineering Mechanics & Building Practices, Network Analysis & Simulation Lab, Electrical Circuit Analysis Lab, Engineering Mechanics Lab, etc.

#### **(e) Audit/ Mandatory courses (MC)**

Mandatory courses include Induction Program, introduction to Design Thinking, Environmental Science, Technical Paper Writing & IPR, and Constitution of India

A student has to secure 40% of the marks in the continuous assessment (**Exam/ Presentation/ Report submission**) for passing the course. No marks or letter grade shall be allotted for all mandatory non-credit courses. Grade shall be awarded as Satisfactory or Unsatisfactory in the mark sheet on the basis of performance.

### **7.2.2 Open Electives**

All Open Electives are offered to students of all branches in general. However, a student shall choose an open Elective from the list in such a manner that he/she has not studied the same course in any form during the Program.

Open Electives I, II, III, and IV are offered across the programs to enhance the knowledge breadth and professional competency of the students. The courses offered under this category cover the knowledge in emerging areas/ technologies.

Each department shall offer minimum two courses to choose and indicate the maximum number of students allowed to register against each course subject to the availability of the faculty and resources. The minimum number of students registered for an elective course **shall be twenty**.

#### **(a) Open Electives I, III**

The student can have flexibility to register for these courses offered by all departments including parent department as an elective. Open electives I and III are offered in V and VI semester.

#### **(b) Open Electives – II, IV (Self - Learning)**

Open electives II & IV are offered as self-learning courses by various departments, including the parent department, as electives in V and VII semesters, subject to department approval.

It is mandatory to complete the open elective-II under self-learning mode (SWAYAM/ NPTEL/ Edx/ Coursera/ Udemy/ others). Self-learning students can register and complete the opted course on any of the approved MOOCs platforms. They must submit the certificate before the last instructional day of the respective semester.

In case of Open Elective-IV, student can complete the course by online mode (SWAYAM/ NPTEL/ Edx/ Coursera/ Udemy/ others) and submit the certificate before the last instructional day of the respective semester. Students those who have not registered under online mode and able to learn by themselves, shall appear for continuous evaluation for 30 marks and semester end examination for 70 marks conducted by the college.

### **7.2.3 Program Core**

The Program core consists of set of courses considered necessary for the students of the specific program. The courses under this category satisfy the Program Specific Criteria prescribed by the appropriate professional societies/bodies.

#### **7.2.4 Program Electives**

The program electives are set of courses offered in the program which cover depth and breadth to further broaden the student's knowledge. The students may register for appropriate electives offered in the program based on their area of interest.

#### **7.2.5 Industry Interaction: Internships & Project Work**

##### **7.2.5.1 Summer Internships**

Two summer internships either onsite or virtual each with a minimum of 06 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.

##### ***I. Engineering Project in Community Services (EPICS) based internship***

At the end of second year this will be carried out during summer vacation for a period of six weeks after IV Semester and the report shall be submitted in V Semester. Students will go to the society (Villages/ Hospitals/ Towns, etc.) to identify the problem and survey the literature for a feasible solution. The student(s) is encouraged to solve real life problems. This can be done in a group of students or as an individual.

Evaluation of the EPICs based internship 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. The report and the oral presentation shall carry 40% and 60% weightages respectively.

##### ***II. Industry Based Internship***

Students shall undergo mandatory summer internship in the industry approved by respective head of the department for a minimum of six weeks duration at the end of VI semester examinations. The report shall be submitted in VII Semester.

Evaluation of the Industry based internship 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 40% and 60% weightages respectively.

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.

##### **7.2.5.2 Full Semester Internship and Project work**

In the final (VIII) semester, the student should undergo internship and parallelly he/she should work on a project with well-defined objectives. 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 project report. A student shall also be permitted to submit project report on the work carried out during the internship.

**Major Project** involves preparation and presentation of report on internship carried out during VIII semester and students are encouraged to publish their work in any research journal/conference. The project report shall be evaluated by a committee consisting of an external examiner.

#### **7.2.6 Student Practice Courses**

Student Practice Courses are aimed at improving their professional competency. Student shall participate and complete successfully any two activities from (a) to (d) as given below, before completion of 6<sup>th</sup> semester:

- (a) **Co-curricular Participation:** Student should participate in Technical Quizzes/ Paper contest/ Seminars/ Technical Events/ Coding/ Model etc., approved by the department.
- (b) **Art and Cultural:** Participation in the university level or above competitions representing the college.
- (c) **Competitions** conducted by Professional Societies (IEEE, IETE, ASME, IE, CSI etc.) in the college or conducted by the other colleges.
- (d) **Publication** in Conference or Journal/ Certifications from Industry as approved by the Head of the Department.

#### **7.2.7 Integrated course:**

Integrated course is defined as a theory course with lab component. It shall be offered as 2-0-2 (or) 1-0-4

#### **7.2.8 Skill course:**

There shall be five skill courses offered during III to VII semesters. Out of the five skill courses, two shall be soft skill courses and three shall be basic and advanced skill courses from the same-domain/Interdisciplinary/Job oriented. All skill courses, one tutorial and two practical hours shall be allotted as per the decision of concerned BoS.

##### ***Soft skill course***

Soft skill courses offered are Personality Development & English for Engineers in III semester, while Logic-Reasoning and Quantitative Aptitude course in the IV semester.

##### ***Technical skill course***

There shall be three skill courses from the same domain or inter disciplinary and shall be completed in V/ VI/ VII semesters.

A pool of interdisciplinary, job-oriented skill courses shall be designed by the Board of Studies in collaboration with participating departments/ disciplines. Additionally, the syllabus, along with the prerequisites, shall be prepared for each laboratory infrastructure requirement. The list of such courses shall be incorporated into the curriculum structure of each branch of engineering, allowing students to choose from the options available.

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 as approved by the concerned BoS.

The Board of studies of the concerned discipline of Engineering shall review the skill advanced courses being offered by eligible external agencies and prepare a fresh list every year incorporating latest courses based on industrial demand.

If a student chooses to take a Certificate Course offered by industries/ Professional bodies/ APSSDC or any other accredited bodies, in lieu of the skill advanced course offered by the Department, the credits shall be awarded to the student upon producing the Course Completion Certificate from the agency/ professional bodies as approved by

the Board of studies.

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 concerned Board of Studies, the student is deemed to have fulfilled the attendance requirement of the course and acquire the credits assigned to the course.

### **7.3 Curricular Framework for Honors Program**

1. Students of a Department/ Discipline are eligible to opt for Honors Program offered by the same Department/ Discipline.
2. A student shall be permitted to register for Honors program at the beginning of 4<sup>th</sup> semester provided that the student must have acquired  $\geq 8$  CGPA without backlogs upto end of 2<sup>nd</sup> semester without any backlogs. In case of the declaration of the 3<sup>rd</sup> semester results after the commencement of the 4<sup>th</sup> semester and if a student fails to score the required  $\geq 8$  CGPA without backlogs, his/ her registration for Honors Program stands cancelled and he/ she shall continue with the regular Program.
3. Students can select the additional and advanced courses from their respective branch in which they are pursuing the degree and get an Honors degree in the same, e.g. If a Mechanical Engineering student completes the selected advanced courses from same branch under this scheme, he/she will be awarded B.Tech. (Honors) in Mechanical Engineering.
4. In addition to fulfilling all the requisites of a Regular B.Tech Program, a student shall earn 20 additional credits to be eligible for the award of B. Tech (Honors) degree. This is in addition to the credits essential for obtaining the Under Graduate Degree in Major Discipline (i.e.160 credits).
5. Of the 20 additional Credits to be acquired, 16 credits shall be earned by undergoing specified courses listed as pools, with four courses, each carrying 4 credits. The remaining 4 credits must be acquired through two MOOCs, of domain specific, each with 2 credits and with a minimum duration of 8/12weeks as recommended by the Board of studies.
6. It is the responsibility of the student to acquire/complete prerequisite before taking the respective course. The courses offered in each pool shall be domain specific courses and advanced courses.
7. The concerned BoS shall decide on the minimum enrolment (20) for offering Honors program by the department. If minimum enrolments criteria are not met then the students shall be permitted to register for the equivalent MOOC courses as approved by the concerned Head of the department in consultation with BoS.
8. Each pool can have theory as well as laboratory courses. If a course comes with a lab component, that component has to be cleared separately. The concerned BoS shall explore the possibility of introducing virtual labs for such courses with lab component. (Model pool list is enclosed in the Annexure-2)
9. MOOCs courses must be of minimum 8 weeks in duration. Attendance will not be monitored for MOOCs courses. Students have to acquire a certificate from the agencies approved by the BoS with grading or marks or pass/fail in order to earn 4 credits. If the

MOOCs course is a pass/fail course without any grades, the grade to be assigned will be as decided by the College Academic Council.

10. The concerned BoS shall also consider courses listed under program electives of the respective B. Tech programs for the requirements of B. Tech (Honors). However, a student shall be permitted to choose only those courses that he/she has not studied in any form during the Program.
11. If a student drops or is terminated from the Honors program, the additional credits so far earned cannot be converted into free or core electives; they will remain extra. These additional courses will find mention in the transcript (but not in the degree certificate). In such cases, the student may choose between the actual grade or a “pass (P)” grade and also choose to omit the mention of the course as for the following:
  - All the courses done under the dropped Honors will be shown in the transcript.
  - None of the courses done under the dropped Honors will be shown in the transcript.
12. In case a student fails to meet the CGPA requirement for Degree with Honors at any point after registration, he/she will be dropped from the list of students eligible for Degree with Honors and they will receive regular B.Tech degree only. However, such students will receive a separate grade sheet mentioning the additional courses completed by them.

#### **7.4 Curricular Framework for Minor Program:**

1. a) Students who are desirous of pursuing their special interest areas other than the chosen discipline of Engineering may opt for additional courses in minor specialization groups offered by a department other than their parent department. For example, If Mechanical Engineering student selects subjects from Civil Engineering under this scheme, he/she will get Major degree of Mechanical Engineering with minor degree of Civil Engineering  
b) Student can also opt for Industry relevant tracks of any branch to obtain the Minor Degree, for example, a B.Tech Mechanical student can opt for the industry relevant tracks like Data Mining track, IOT track, Machine learning track etc.
2. The BoS concerned shall identify as many tracks as possible in the areas of emerging technologies and industrial relevance / demand. For example, the minor tracks can be the fundamental courses in CSE, ECE, EEE, CE, ME etc. or industry tracks such as Artificial Intelligence (AI), Machine Learning (ML), Data Science (DS), Robotics, Electric vehicles, Robotics, VLSI etc.
3. The list of disciplines/branches eligible to opt for a particular industry relevant minor specialization shall be clearly mentioned by the respective BoS.
4. There shall be no limit on the number of programs offered under Minor. The University/Institution can offer minor programs in emerging technologies based on expertise in the respective departments or can explore the possibility of collaborating with the relevant industries/ agencies in offering the program.
5. The concerned BoS shall decide on the minimum enrolments for offering Minor program by the department. If a minimum enrolment criterion is not met, then the students may be permitted to register for the equivalent MOOC courses as approved by the concerned Head of the department in consultation with BoS.
6. A student shall be permitted to register for Minors program at the beginning of 4<sup>th</sup> semester subject to a maximum of two additional courses per semester, provided that the

student must have acquired  $\geq 7.75$  CGPA (Cumulative Grade point average) up to the end of 2<sup>nd</sup> semester without any history of backlogs. It is expected that the 3<sup>rd</sup> semester results may be announced after the commencement of the 4<sup>th</sup> semester. If a student fails to acquire a minimum of 7.75 CGPA up to 3<sup>rd</sup> semester or failed in any of the courses, his registration for Minors program shall stand cancelled. A CGPA of 7.75 has to be maintained in the subsequent semesters without any backlog in order to keep the Minors registration active.

7. A student shall earn additional 20 credits in the specified area to be eligible for the award of B. Tech degree with Minor. This is in addition to the credits essential for obtaining the Under Graduate Degree in Major Discipline (i.e. 160 credits).
8. Out of the 20 Credits, 16 credits shall be earned by undergoing specified courses listed by the concerned BoS along with prerequisites. It is the responsibility of the student to acquire/complete prerequisite before taking the respective course. If a course comes with a lab component, that component has to be cleared separately. A student shall be permitted to choose only those courses that he/she has not studied in any form during the Program.
9. In addition to the 16 credits, students must pursue at least 2 courses through MOOCs. The courses must be of minimum 8 weeks in duration. Attendance will not be monitored for MOOC courses. Student has to acquire a certificate from the agencies approved by the BoS with grading or marks or pass/fail in order to earn 4 credits. If the MOOCs course is a pass/ fail course without any grades, the grade to be assigned as decided by the college academic council.
10. Student can opt for the Industry relevant minor specialization as approved by the concerned departmental BoS. Student can opt the courses from Skill Development Corporation (APSSDC) or can opt the courses from an external agency recommended and approved by concerned BoS and should produce course completion certificate. The Board of studies of the concerned discipline of Engineering shall review such courses being offered by eligible external agencies and prepare a fresh list every year incorporating latest skills based on industrial demand.
11. A committee should be formed at the level of department to evaluate the grades/marks given by external agencies to a student which are approved by concerned BoS. Upon completion of courses the departmental committee should convert the obtained grades/marks to the maximum marks assigned to that course. The controller of examinations can take a decision on such conversions and may give appropriate grades.
13. If a student drops (or terminated) from the Minor program, they cannot convert the earned credits into free or core electives; they will remain extra. These additional courses will find mention in the transcript (but not in the degree certificate). In such cases, the student may choose between the actual grade or a “pass (P)” grade and also choose to omit the mention of the course as for the following:
  - All the courses done under the dropped Honors will be shown in the transcript.
  - None of the courses done under the dropped Honors will be shown in the transcript.
12. In case a student fails to meet the CGPA requirement for B.Tech degree with Minor at any point after registration, he/ she will be dropped from the list of students eligible for degree with Minors and they will receive B. Tech degree only. However, such students will receive a separate grade sheet mentioning the additional courses completed by them.

## 7.5 Course Numbering Scheme

The Course number consists of eight digits/ alphabets. The example course number is illustrated in the following Figure -1.

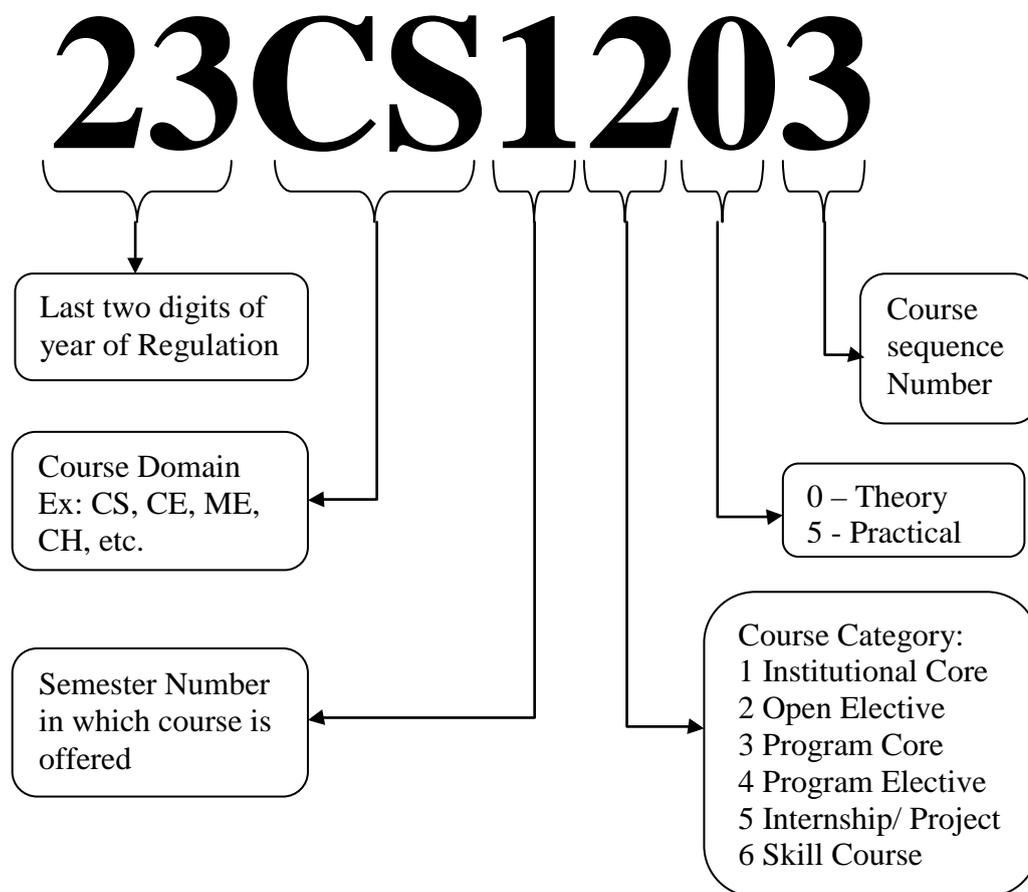


Figure 1: Course numbering scheme

## 7.6 Scheme of Instruction and Examination

The scheme of instruction and examination of all B. Tech programs are given in the curriculum books separately.

## 7.7 Medium of Instruction and Examination

The medium of instruction and examination is English

## 8. Choice Based Credit System (CBCS)

Flexibility is extended to the fast learning students to take the courses of higher semesters in advance as per their convenience to concentrate on their placement activity/ project work etc., during the seventh/eighth semesters.

### 8.1 CBCS Course Registration Policy

Fast learning students can register for additional courses from higher semesters by satisfying the prerequisite course(s) to a maximum of 8 credits in each of the semesters from 3<sup>rd</sup> semester onwards along with the regular semester courses as prescribed. There is no minimum limit on the credits for taking additional courses.

**Eligibility for choosing CBCS flexibility:**

- **Regular Students (4 Year duration)**, entering the  $n^{\text{th}}$  semester with no back log courses as on date and with CGPA  $\geq 7.00$  up to  $(n-2)^{\text{th}}$  semester are only eligible to opt for this flexibility.
- **Lateral entry students (3 Year duration)** with 70% Marks in their Diploma are eligible to opt for this flexibility during 3<sup>rd</sup> and 4<sup>th</sup> Semesters. Those students entering into V/ VI/ VII semester with no backlog courses as on date and with CGPA  $\geq 7.00$  up to  $(n-2)^{\text{th}}$  semester, are only eligible to opt for this flexibility
- List of additional courses offered in the even & odd semesters, registration dates will be notified by the respective departments well in advance.
- Withdrawal from the respective course by the student within 10 days after the commencement of the course.
- Choice of opting this flexibility is purely optional to the students. Minimum number of students required to register for an additional course shall be twenty (20). In case the registered strength for the additional course is less than twenty (20), the course may be offered on the recommendation of the Head of the Department and subsequent approval of the Principal.

**8.2 Continuous Evaluation (CE) for CBCS opted Courses**

The contact hours, continuous assessment pattern, eligibility criteria to write end semester examinations and revaluation scheme for these additional courses will be as per the current academic regulations [VR23].

**8.3 Eligibility to appear CBCS registered courses for Semester End Examinations**

The registered additional courses will be dealt separately as individual courses for the calculation of attendance and continuous assessment marks for assessing the eligibility to write the end semester examinations for these courses.

The performance of the student in the registered additional courses will be taken into account in the corresponding semesters.

**8.4 CBCS Course Detention**

**8.4.1.** In case the student is detained for want of minimum specified attendance and continuous assessment marks criterion either in the regular semester or in the additional courses, he/ she will forfeit the eligibility for registering additional courses from that semester onwards. However, the additional courses completed by the students in the earlier semesters will be valid and taken into consideration.

**8.4.2.** In case the student is detained for want of minimum specified attendance and continuous assessment marks criterion in the regular semester but meets minimum specified attendance and continuous assessment marks criterion in the registered additional courses, he/ she shall write the end semester examinations for these additional courses along with the regular students in the corresponding semester only.

**8.4.3.** In case the student fails/ absent in the end semester examinations of the registered additional courses or in the regular semester courses in a particular semester, he will forfeit the eligibility for registering additional courses from that semester onwards. However, the additional courses completed by the students in the earlier semesters will

be valid and taken into consideration. They can write the end semester examinations for additional courses in which they failed/ absent, along with regular students in the corresponding semesters only.

- 8.4.4. Criterion for the promotion to higher semesters will be as per VR23 regulations taking only the regular semester courses into consideration for the fast learners.
- 8.4.5. Additional courses, in which the fast learning student fails, will not be taken as backlogs for them.
- 8.4.6. Fast learning students shall register for all the courses of a regular semester excluding the courses completed in the previous semesters.
- 8.4.7. Credits scored by students through CBCS subjects shall not be considered for credit promotion from 2<sup>nd</sup> year to 3<sup>rd</sup> year or from 3<sup>rd</sup> year to 4<sup>th</sup> year B.Tech.
- 8.4.8. The student opting for the said flexibility will be considered for award of the division on par with other regular students.
- 8.4.9. The students who had earlier history of indulging in malpractices in semester end examinations are not eligible for opting CBCS
- 8.4.10. If the student fails to register for opted CBCS courses for semester end examination he/ she will forfeit the eligibility for registering additional courses from that semester onwards and marks secured through continuous assessment will not be considered.
- 8.4.11. The choice of opting this flexibility is purely optional to the students.
- 8.4.12. If a student fails/ absent in a CBCS course, he/ she is bound to appear in the same course when studied in regular semester. The internal marks will be carried to the regular semester.

## 9 EXAMINATIONS & SCHEME OF EVALUATION

### 9.1 Description of Evaluation

**Continuous Evaluation (CE):** The performance of the student in each course is evaluated by the faculty/course coordinator all through the semester; with mid-term tests (sessional-1 and sessional-2), assignments, project reviews, viva voce, laboratory assessment and other means covering the entire syllabus of the course.

**Semester End Evaluation (SE):** It shall be conducted by Chief 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 work with built-in oral part for laboratory/project.

### 9.2 Continuous Evaluation (CE)

#### 9.2.1. Theory Courses

**9.2.1.1. Theory Courses with credits:** Each course is evaluated for 30 marks (a + b + c)

- a) Two *Class* tests each for 10 marks will be conducted for 45 minutes duration. The assignment marks shall be awarded giving a weightage of 2/3<sup>rd</sup> in the assignment test in which the student scores more marks and 1/3<sup>rd</sup> for the assignment test in which the student scores less marks.

Question bank with minimum six comprehensive questions from the concerned UNIT of the syllabus will be given at least a week in advance before the commencement of Assignment Test. The question paper shall contain two comprehensive questions, each one for five marks. The student is required to answer all the questions.

- b) Two midterm (Sessional-1 and Sessional-2) examinations each for 15 marks will be conducted for 75 minutes duration. The midterm marks shall be awarded giving a weightage of 2/3<sup>rd</sup> in the midterm examination in which the student scores more marks and 1/3<sup>rd</sup> for the midterm examination in which the student scores less marks.

The question paper shall be given in the following pattern:

**Part A:** Contains “five” questions of one mark each. The student shall answer all questions.

**Part B:** Contains three questions of 5 marks each, out of which student shall answer two questions.

- c) Five marks in each theory course shall be allotted for home assignments. The home assignments are to be decided by the course coordinators. There shall not be an overlap or repetition of questions/ problems of home assignments with those of assignment tests. Separate problems are to be given for each group (3 to 4 students). The home assignments for five marks to provide broadened exposure to the course. The questions shall include problem solving approach, problem analysis & design, implementation, case studies etc.,

The questions shall be framed in assignments, sessional examinations and home assignments in line with the Course Outcomes defined and cognitive levels.

**Table 2: Syllabus and distribution of Marks for Continuous Evaluation (CE)**

Name of the Test	Syllabus	Marks
<i>Class Test – 1</i>	UNIT - I	10
Sessional – 1	UNIT - I & UNIT - II	15
<i>Class Test – 2</i>	UNIT - III	10
Sessional – 2	UNIT - III & UNIT - IV	15
Home Assignment	Covering all Units	5

### 9.2.1.2 Theory courses without Credits (Audit/ Mandatory Courses)

Each course is evaluated for 100 marks

- In continuous assessment two examinations will be conducted (Sessional Examination/ Presentation/ Report) for 80 marks. Each examination will be conducted for 40 marks of 90 minutes duration. The question paper shall be given in the following pattern:

**Part A:** Contains “Eight” questions of one mark each.

**Part B:** Contains “Six” questions of Eight Marks each out of which students shall answer any four questions.

**Table: 3 – Syllabus and distribution of Marks for Audit/ Mandatory Courses**

Name of the Test	Syllabus	Marks
Sessional – 1	UNIT - I & UNIT - II	40
Sessional – 2	UNIT - III & UNIT - IV	40
Home Assignment-I	UNIT - I & UNIT – II	10
Home Assignment-II	UNIT - III & UNIT – IV	10

The question paper pattern may vary for some courses (soft skills and Humanities elective) based on the recommendations of the head of the department and approved by the Principal. The questions shall be framed in line with the Course Outcomes defined and cognitive levels.

**Twenty marks** shall be allotted for home assignments/ Seminar. The Home Assignment/ Seminar is to be decided by the course coordinators. Separate Problems are to be given for each group (3 to 4 students). The home Assignment/ Seminar for **20 marks** to provide broadened exposure to the course.

Credits and grades will be awarded as per **VR23** Regulation and Mandatory Learning courses do not carry credits.

In case, if the student fails to get minimum qualifying marks in the continuous assessment, he/ she has to appear and pass in subsequent examination(s) when conducted for the respective course(s) to award the degree. However, he/ she has to register for the supplementary examination by paying prescribed fee.

### 9.2.1.3 Skill Courses (Mandatory)

(a) Skill courses offered by external agencies:

The student shall register for the courses offered by external agencies (Industry/ Professional Bodies/ APSSDC/ any other accredited bodies) for a period of 8 Weeks/ 30 Contract hours. No continuous assessment for these types of courses. The credits shall be awarded to the student upon producing course completion certification from the agencies.

(b) Skill courses offered by the college.

The student can choose the skill course offered by the college. The college shall mark attendance of the student for these courses in the calculation of mandatory attendance requirements. There shall be continuous evaluation during the semester for 30 marks and semester end examination for 70 marks. The distribution of marks for continuous evaluation is given below:

**Table 4: Distribution of Marks for Skill Courses**

S.No.	Criterion	Marks
1	Day to day work	10
2	Assesment-1	10
3	Assesment-2	10

### 9.2.2. Laboratory Courses

For Laboratory courses there shall be continuous evaluation during the semester for 30 marks and semester end evaluation for 70 marks. The distribution of marks for continuous evaluation is given below:

**Table 5: Distribution of Marks for Laboratory Courses (CE)**

S. No.	Criterion	Marks
1	Day to Day work	10
2	Record	05
3	Assessment	15

### 9.2.3. Internship (EPIC & Industry):

There shall be continuous evaluation during the semester for 30 marks and semester end evaluation for 70 marks. The distribution of continuous evaluation marks is given below: The continuous evaluation for the above shall be on the basis of day to day assessment by the supervisor and two reviews conducted by the Project Review Committee (PRC). The PRC consists of Head of the Department, Program Coordinator and one Senior Faculty member of the department along with supervisor of the Project.

**Table 6: Distribution of Marks for Internship (EPIC & Industry) (CE)**

S. No.	Criterion	Marks
1	Day to Day Assessment	10
2	Two Reviews	10 + 10

### 9.2.4. Full Internship & Major Project

There shall be continuous evaluation for Major Project during the semester for 30 marks and semester end evaluation for 70 marks. The continuous evaluation for the Major Project shall be on the basis of day to day assessment by the supervisor and two reviews conducted by the Project Review Committee (PRC). The PRC consists of Head of the Department, Program Coordinator and one Senior Faculty member of the department along with supervisor of the Project. The distribution of marks is given below:

**Table 7: Distribution of Marks for Full Internship & Major Project (CE)**

S. No.	Criteria	Distribution	Marks
1	Major Project (20M)	Day to Day Assessment	10
		Review-1	5
		Review-2	5
2	Internship (10M)	Review-1	5
		Review-2	5
<b>Total Marks</b>			<b>30</b>

### 9.2.5 Integrated Course:

The evaluation procedure for the integrated course is given below:

Continuous Assessment for 30 Marks:

**Table 8: Distribution of Marks for Integrated Course (CE)**

Class Test – I & II	10 Marks (based on laboratory syllabus)
Sessional-1	15 Marks (based on theory syllabus of Unit I & II)
Sessional-2	15 Marks (based on theory syllabus of Unit III & IV)
Home Assignment	05 Marks (Group Assignment/ Laboratory Task)

### 9.2.6 Self-Learning Courses (for Open-Electives: II & IV) (Prescribed from the existing open courseware)

Students who have qualified in the examination conducted by the MOOCs providers are exempted from appearing in the continuous and semester end evaluations conducted by the institution in that category.

In case a student fails to complete the MOOCs course offered by MOOCs providers, he/ she may be allowed to register again for the same with any of the providers from the list approved by the department.

For Open Elective-IV, those students who have not registered under MOOCs platform and are able to learn by themselves shall appear for continuous evaluation for 30 marks and semester end examination for 70 marks.

The distribution of marks for continuous evaluation is given below:

**Table 9: Distribution of Marks for Self-Learning Courses (CE)**

S.No	Criterion	Marks
1	Home Assignment	05
2	Assignment Tests	10
3	Sessional Examinations	15

## 9.3 Semester End Evaluation

### 9.3.1. Theory Courses

#### 9.3.1.1. Theory Courses with Credits (Under 7.2.1 to 7.2.5, 7.2.7 & 7.2.8): 70 Marks

The Semester end evaluation shall be conducted for 3 hours duration at the end of the semester. The question paper shall be given in the following pattern:

**Part A:** Contains 10 questions of one mark each to test the knowledge level of the student. A minimum of two Questions will be given from each unit of the syllabus out of four units.

**Part B:** Contains two questions from each unit with internal choice. Each question carries 15 marks. Each course shall consist of four units of syllabus. The questions shall be framed in line with the Course Outcomes defined and cognitive levels.

#### 9.3.1.2. Theory courses with no credit (Audit/ Mandatory Courses)

There shall be no Semester End Examination for this category of courses.

The grades earned by the students from the theory courses with one credit will be considered for the calculation of CGPA.

For Induction program, student is required to submit comprehensive report about the program. Concerned faculty members shall evaluate the report and rate the performance of the student as satisfactory or not-satisfactory.

#### 9.3.1.3 Skill courses (Mandatory)

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 equivalent marks/ grades. The recommended conversions and appropriate grades/ marks are to be approved by the College/ Academic Council. Marks are distributed as given below:

**Table 10: Distribution of Marks for Skill courses**

S.No.	Criterion	Marks %
1	Acquiring certificate	50
2	Report & Presentation	30
3	Viva-voce	20

**9.3.2. Laboratory Courses: 70 Marks**

- i. The semester end examination for laboratory courses shall be conducted for three hour duration at the end of semester for 70 marks as given below:

**Table 11: Distribution of Marks for Laboratory Courses**

S.No.	Criterion	Marks
1	Procedure	20
2	Experiment/ Program execution	25
3	Results	10
4	Viva-voice	15

- ii. Each Semester-end Laboratory Examination shall be conducted by an External Examiner along with an Internal Examiner. The average of the marks awarded by Internal and External Examiners shall be taken into consideration.

**9.3.3. Internship (EPICS & Industry): 70 marks**

The distribution of semester end examination marks are given below:

**Table 12: Distribution of Marks for Internship (EPICS & Industry)**

S.No.	Criterion	Marks
1	Report	30
2	Presentation and Viva Voce	20 + 20

The semester end examination shall be conducted and evaluated by the Committee nominated by the Head of the Department.

**9.3.4. Full Internship & Major Project: 70 marks**

The semester end examination for Internship/project work shall be held for 70 marks by a committee consisting of an external examiner, Head of the Department and Program coordinator. The evaluation of project work shall be conducted at the end of the VIII Semester.

The average of the marks awarded by the committee members shall be taken into consideration in case of variation among the members.

The evaluation of 70 marks is distributed as given below:

**Table 13: Distribution of Marks for Major Project**

S. No.	Criteria	Distribution	Marks
1	Major Project (50M)	Report Writing	20
		Presentation	15
		Viva Voce	15
2	Internship (20 M)	Report Writing	10
		Presentation	5
		Viva Voce	5
<b>Total</b>			<b>70</b>

**9.3.5. Integrated Course**

The Semester end evaluation shall be conducted for 3 hours duration at the end of the semester. The question paper shall be given in the following pattern:

**Part A:** Contains 10 questions of one mark each to test the knowledge level of the student. A minimum of two Questions will be given from each unit of the syllabus out of four units.

**Part B:** Contains two questions from each unit with internal choice. Each question carries 15 marks. Each course shall consist of four units of syllabus.

**9.3.6. Self- Learning Course (Prescribed from the existing from Open Courseware)**Open Elective II & IV (Self-Learning)

Open electives are offered across all programs to enhance the knowledge breadth and professional competency of the students. Students can register and complete the opted course in any one of the approved MOOCs platforms and submit the certificate before the last instruction day of respective semesters (7.2.2. (b)). These courses can be chosen from the list of approved MOOCs providers (SWAYAM/ NPTEL/ Edx/ Coursera/ Udemy/ others).

While choosing the courses, the following norms are to be observed.

- Minimum duration of the course shall be at least 12 weeks and can be specialization consisting of a package of courses with minimum duration of **12 weeks**.
- The courses shall not from part of the curriculum and must be approved by the respective Boards of Studies.

**9.4 Conditions for Pass**

**9.4.1.** A candidate shall be declared to have passed in individual theory/ drawing course if he/ she secures a minimum of 40% aggregate marks (Continuous Evaluation & Semester End Examination marks put together), subject to a minimum of 35% marks in semester end examination.

**9.4.2.** A candidate shall be declared to have passed in individual laboratory course/ Internship (EPIC & Industry)/ Full Internship & Major Project if he/ she secures a minimum of 50% aggregate marks (Continuous Evaluation & semester end examination marks put together), subject to a minimum of 40% marks in semester end examination.

**9.4.3.** The student has to pass the failed course by appearing the supplementary examination as per the requirement for the award of degree. In the case of Internship (EPIC & Industry)/ Full Internship & Major Project the student has to pass by appearing in

subsequent examination as and when held.

**9.4.4.** On passing a course of a program, the student shall earn assigned credits for that Course.

## **9.5 Revaluation**

### **9.5.1. Continuous Evaluation**

The continuous evaluation scripts shall be shown to the students before finalizing the marks. If the student has any concern, not addressed before finalization of marks, he/she may submit the application for revaluation to the concerned head of the department. The Head of the Department may constitute a two member committee for re-evaluating the script. The evaluation of the committee is final and binding.

### **9.5.2. Semester End Evaluation**

- 1 As per the notification issued by the Chief Controller of Examinations, the students can submit the applications for revaluation, along with the requisite fee receipt for revaluation of his/ her answer script(s) of theory course(s), if he/ she is not satisfied with marks obtained.
- 2 The Controller of Examinations shall arrange for re-evaluation of those answer script(s).
- 3 A new external examiner, other than the first examiner, shall re-evaluate the answer script(s).
- 4 Better marks between the two will be taken into consideration.

## **9.6 Withholding of Results**

If any case of malpractice or indiscipline is pending against a student, the result of the student will be withheld and he/she will not be allowed to enter the next semester. His/her degree will be withheld in such cases.

## **10 CRITERIA TO ATTEND SEMESTER END EXAMINATION AND PROMOTION TO HIGHER SEMESTER**

### **10.1 Eligibility for Semester End Examinations**

#### **10.1.1 Attendance (Minimum 75%)**

**10.1.1.1** A student shall be eligible to appear for semester end examinations if he/ she acquires a minimum of 75% of attendance in aggregate of all the subjects (theory, tutorial, drawing, laboratory, Internships, major project works) in a semester subjected to a minimum of 40% in each course.

**10.1.1.2** Condonation of shortage in attendance may be recommended by respective Heads of Departments on genuine medical grounds, provided the students puts in at least 65% attendance and provided the Principal is satisfied with the genuineness of the reasons and conduct of the student.

**10.1.1.3** A stipulated fee shall be payable towards condonation of shortage of attendance to the college.

**10.1.1.4** A student will not be promoted to the next semester unless he satisfies the attendance requirements of the present semester, as applicable. They may seek readmission for that semester when offered next.

### 10.1.2 Marks (Minimum 50%)

**10.1.2.1.** Minimum of 50% aggregate marks in courses from category 7.2.1 to 7.2.5, 7.2.7 and 7.2.8 must be secured by the candidates in the continuous assessment conducted for theory, practice and laboratory courses, to be eligible to write semester end examinations.

**10.1.2.2.** However, if the student is eligible to write the semester end examinations based on the attendance, in case necessary, a shortage of continuous assessment examination marks up to a maximum of 10% may be condoned by the Principal based on the recommendations of the respective Heads of the Departments.

**10.1.2.3.** Students having shortage of continuous assessment examination marks upto a maximum of 10% shall have to pay requisite fee towards condonation.

**10.1.2.4** Eligible candidate who fails to register for the semester end examinations shall not be permitted to continue the subsequent semester, and has to repeat the semester for which he/she has not registered for semester end examinations.

### 10.2 Conditions for Promotion

**10.2.1.** A student shall be eligible for promotion to next Semester of B.Tech. program, if he/she satisfies the conditions as stipulated in Regulations **10.1.1 and 10.1.2.**

**10.2.2.** Further a student shall be eligible for promotion to V/ VII Semester of B.Tech. Program, if he/she acquires the minimum number of credits as given below.

**Table 14: Promotion Criteria**

For Admission into	Minimum Credits Required	
	Regular Students	Lateral Entry Students
V Semester	41 out of 82	-
VII Semester	62 out of 125	42 out of 85

#### 10.2.3. Promotion to V Semester

A student shall be promoted from **IV Semester to V Semester** only if he/she acquires the academic requirement of a minimum **41 credits** up to IV Semester from the following examinations:

1. One regular and three subsequent supplementary examinations of I Semester
2. One regular and two subsequent supplementary examinations of II Semester
3. One regular and one subsequent supplementary examination of III Semester
4. One regular examination of IV Semester

Irrespective of the candidate takes the examination or not.

#### 10.2.4. Promotion to VII Semester

##### 10.2.4.1 For Regular Students

A student shall be promoted from **VI Semester to VII Semester** only if he/she acquires the academic requirement of a minimum **62 credits** up to VI Semester from the following examinations:

- 1 One regular and five subsequent supplementary examinations of I Semester
- 2 One regular and four subsequent supplementary examination of II Semester
- 3 One regular and three subsequent supplementary examinations of III Semester
- 4 One regular and two subsequent supplementary examinations of IV Semester

5 One regular and one subsequent supplementary examination of V Semester

6 One regular examination of VI Semester

Irrespective of the candidate takes the examination or not.

#### **10.2.4.2 For Lateral Entry Students**

A student shall be promoted from **VI Semester to VII Semester** only if he/she acquires the academic requirement of a minimum **42 credits** up to VI Semester from the following examinations:

One regular and three subsequent supplementary examinations of III Semester

1. One regular and two subsequent supplementary examinations IV Semester

2. One regular and one subsequent supplementary examination of V Semester

3. One regular examination of VI Semester

Irrespective of the candidate takes the examination or not.

#### **10.2.4.2. Students detained for lack of Credits**

a) Students who are already detained for want of credits shall be promoted to V Semester if he/she fulfils the credit requirements (41 credits) from all the regular and supplementary examinations held up to IV Semester till the commencement of next academic year.

b) Students who are already detained for want of credits shall be promoted to VII Semester if he/ she fulfils the credit requirements (62 credits – regular students/ 42 credits – Lateral entry students) from all the regular and supplementary examinations held up to VI Semester till the commencement of next academic year.

## **11 SUPPLEMENTARY EXAMINATIONS**

### **11.1 General**

**11.1.1.** Semester end Supplementary examinations will be conducted along with regular semester end examinations.

**11.1.2.** Semester end supplementary Examinations shall be conducted in courses of each semester four times after the conduct of the last set of regular examinations (i.e. IV/ IV B.Tech., Eighth Semester Examinations) under the present regulation.

**11.1.3.** There after supplementary examinations will be conducted in the equivalent courses as prescribed by concerned BoS.

### **11.2 Advanced Supplementary Exams**

Candidate(s), who fails in Theory or Laboratory courses of 4<sup>th</sup> year II semester, can appear for advanced supplementary examination conducted within one month after declaration of the revaluation results. However, those candidates that fail in the advanced supplementary examinations of 4<sup>th</sup> year II semester shall appear for subsequent examinations along with regular candidates conducted at the end of the respective academic year.

## **12 READMISSION CRITERIA**

**12.1.1.** A candidate, who is detained in a semester due to lack of attendance/ marks, has to obtain written permission from the Principal for readmission into the same semester after duly fulfilling all the required norms stipulated by the college in addition to paying an administrative fee of **Rs. 1,000/-**

**12.1.2.** Admission Criteria for the students who are not promoted to next semester due to lack of credits.

A candidate who is not promoted to next semester due to lack of credits has to fulfil the minimum requirement of 50% credits by passing required number of courses in subsequent semester end examinations for admitting into the next semester.

### **12.2. Rules for calculation of attendance for readmitted students**

- a) No. of classes will be counted from the commencement of class work of the semester rather than the date of payment of tuition fee, if he/she paid the tuition fee after the commencement of class work.
- b) They should submit a written request to the principal of the college, along with a challan paid towards tuition and other fee, for readmission on or before two weeks of the commencement of the class work.
- c) They may know the information regarding date of commencement of class work for each semester that will be made available in the college notice boards/website from time to time.

## **13 BREAK IN STUDY**

Student, who discontinues the studies for whatever may be the reason, can get readmission into appropriate semester of B.Tech. program after break-in study, with the prior permission of the Principal and following the transitory regulations applicable to such batch in which he/she joins. An administrative fee of **Rs. 2000/-** per each year of break in study in addition to the prescribed tuition and special fee has to be paid by the candidate to condone his/her break in study.

## **14 Gap Year - Concept of Student Entrepreneurship in Residence**

Gap Year facility is extended by the committee chaired by the Principal to the outstanding students who wish to pursue entrepreneurship during their course of study with a break of one year or two years. This is extended to two years at the most and these two years would not be counted for the maximum time period of graduation. The gap year facility is given to ensure syllabus continuity at the time of joining back and after an appraisal process by an incubator where the student is attached. Students who avail gap year facility should follow transitory regulations.

First class with distinction will be awarded to those students who availed themselves of gap year facility to pursue entrepreneurship subject to fulfilment of all conditions stipulated in academic regulations for the award of first class with distinction.

## **15 IT& Entrepreneurship at College level**

The committee with the Principal as the chairman, an external member (preferably from industry), two internal members and respective HOD as the member secretary will evaluate the students who are involved in IT and entrepreneurship activities and decides awarding of 5% grace marks and 20% attendance.

The committee is vested with the power & authority to ascertain the modalities and parameters to recognize a specific student as “Outstanding” for granting gap period for

the purpose of pursuing entrepreneurship in residence and also for working on “Startup Idea” at the college level, as far as student entrepreneur working on start-up idea is concerned. Student entrepreneurs working on a startup idea during first year of the college may be permitted to convert their start-up project as their final year project towards degree completion.

First class with distinction will be awarded to those students who availed themselves of gap year facility to pursue entrepreneurship subject to fulfilment of all conditions stipulated in academic regulations for the award of first class with distinction.

## 16 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 the College Academic Council.

## 17 ELIGIBILITY FOR AWARD OF B.Tech. DEGREE

17.1 The B.Tech Degree shall be conferred on a candidate who satisfies the following requirements.

17.1.1. a) A Regular student (four year program) should register for 160 credits and secure all the Credits from the categories 7.2.1 to 7.2.8.

b) Student shall earn minimum pass grade from the category 7.2.1(e)

c) Student shall attain satisfactory performance from the category 7.2.6

17.1.2. a) A Lateral Entry student (three year program) should register for 120 credits and secure all the Credits from the categories 7.2.1 to 7.2.8.

b) Student shall earn minimum pass grade from the category 7.2.1(e)

c) Student shall attain satisfactory performance from the category 7.2.6

### 17.2 Award of Division

The criteria for award of division, after successful completion of program as per section 17.1 is as shown below:

**Table 15: Criteria for Award of Division**

CGPA	DIVISION
≥ 7.75	* First Class with distinction
≥ 6.75	First Class
≥ 5.75 - <6.75	Second Class
≥ 5.00 - <5.75	Pass Class
< 5	Fail

Conversion of CGPA into equivalent percentage as follows:

$$\text{Equivalent Percentage} = (\text{CGPA} - 0.75) \times 10$$

- \* Awarded only if all the credit courses prescribed are cleared in single attempt with in four years for regular candidates and three years for lateral entry candidates
- \* Detained and break-in study candidates are not eligible for the award of First Class with Distinction
- \* The students who are approved for break in study for entrepreneurs/ start-ups will also be considered for award of first class with distinction
- \* The cases of students who are absent for semester end examination only once in his/her duration of B Tech program on valid medical grounds/humanitarian grounds will also be considered for the award of First class with Distinction subject to the recommendations of the committee constituted by the Principal. For the purpose of awarding First, Second and Pass Class CGPA obtained in the examinations appeared within the maximum period allowed for the completion of the program shall be considered.
- \* The student failing to pass in the mandatory learning courses in the first attempt and pass later as supplementary candidate, may also be awarded “Distinction” akin to other students who pass all the courses at first attempt and fulfil the required conditions for the award of “**Distinction**”.

### **17.3 Consolidated Grade Card**

A consolidated grade card containing credits & grades obtained by the students will be issued after successful completion of the four years B.Tech Program.

## **18 IMPROVEMENT OF CUMULATIVE GRADE POINT AVERAGE**

- 18.1 A candidate, after becoming eligible for the award of the Degree, may reappear for the semester end examination in any of the theory courses as and when conducted, for the purpose of improving the CGPA and the division. But this reappearance shall be within a period of two academic years after becoming eligible for the award of the degree subject to fulfilment of current regulation 17.0.  
Candidates shall not be permitted to reappear either for continuous evaluation or for semester end examinations in laboratory courses.
- 18.2 However, this facility shall not be availed by a candidate who has taken the Provisional Certificate.
- 18.3 Modified Grade Cards & Consolidated Grade Card will be issued after incorporating new Grades & Credits.

## **19 CONDUCT AND DISCIPLINE**

- 19.1 Students shall conduct themselves within and outside the premises of the Institute in a manner befitting the students of our Institution.
- 19.2 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.
- 19.3 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) Wilful damage or distribution of alcoholic drinks or any kind of narcotics to fellow

students/ citizens

19.4 The following activities are not allowed within the campus

- a) Possession, consumption or distribution of alcoholic drinks or any kind of narcotics or hallucinogenic drugs.
- b) Mutilation or unauthorized possession of library books.
- c) Noisy and unseemly behavior, disturbing studies of fellow students.
- d) Hacking computer systems (such as entering into other person's areas without prior permission, manipulation and/or damage of computer hardware and software or any other cybercrime etc.)
- e) Use of cell phones in the campus.
- f) Plagiarism of any nature.
- g) Any other act of gross indiscipline as decided by the college from time to time.

19.5 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.

19.6 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 Principal, respectively, shall have the authority to reprimand or impose fine.

19.7 Cases of adoption of unfair means and/or any malpractice in an examination shall be reported to the Principal for taking appropriate action.

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

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

19.10 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.

19.11 The Disciplinary Action Committee constituted by the Principal, 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.

19.12 "Grievance Appeal Committee" (General) constituted by the Principal shall deal with all grievances pertaining to the academic / administrative /disciplinary matters.

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

## **20 MALPRACTICES**

### **20.1**

- a) The Principal shall refer the cases of malpractices in semester-end examinations to a Malpractice Enquiry Committee, constituted by him/her for the purpose. Such committee shall follow the approved scales of punishment. The Principal shall take necessary action, against the erring students based on the recommendations of the committee.
- b) The cases of malpractices in continuous evaluation tests (both Theory and Practical) shall be resolved by the head of the department following the approved scales of

punishment notified to students in advance.

If the Student has any grievance on the decision of the Head of the Department, he/she may appeal to the principal in the case of continuous evaluation tests.

**20.2** Any action on the part of candidate at an examination trying to get undue advantage in the performance or trying to help another, or derive the same through unfair means is punishable according to the provisions contained hereunder. The involvement of the Staff, who are in charge of conducting examinations, valuing examination papers and preparing/keeping records of documents relating to the examinations, in such acts (inclusive of providing incorrect or misleading information) that infringe upon the course of natural justice to one and all concerned at the examination shall be viewed seriously and recommended for award of appropriate punishment after thorough enquiry.

## **21 COMPENSATORY ASSIGNMENTS IN CONTINUOUS EVALUATION**

Special permission to conduct compensatory assignment tests in continuous evaluation on medical grounds/ participation in important Curricular/ Co-Curricular/ Extra-Curricular activities/ Off Campus Placements.

### **COMPENSATORY ASSIGNMENT TEST:**

A compensatory assignment test will be provided for those students remained absent for the test due to a valid/ unavoidable circumstances, like:

A Student seeking prior leave on account of:

- i) Accident or severe illness leading to hospitalization, which disables the student from writing the Assignment Test.
- ii) A calamity in the family (first relation Only- Parents, Grandparents and Siblings) barring the student from writing the Assignment Test.

### **Mandatory Requirement:**

- ❖ In the event of (i) and (ii) above, it is mandatory on the part of student / parent to inform the respective departmental authorities (Proctor/ HOD) immediately through email or mobile message and submit a prior leave request. If the information reaches the Proctor first, it is the responsibility of the Proctor to immediately intimate the HOD and record the same in the Proctor's diary without fail.
- ❖ After such an event at the time of reporting to the College, the student must submit all the relevant reports/certificates from the competent authority for approval of the prior leave request. The prior leave request will then be converted to official leave and an endorsement will be issued by the committee appointed for the purpose, based on which the student becomes eligible for the Compensatory Assignment Test.
- ❖ Students, who have sought prior permission from concerned HOD through proper channel, and there after permitted by the college for taking part in important curricular/ co-curricular/ extra-curricular activities like NCC/ NSS/ Sports/ Cultural/ Project Competitions/ Hackathons/ Technical events at University/ State/ National/ International levels/ Off – Campus Placements.
- ❖ After such an event, at the time of reporting to the College, the student must submit the proof of participation/ certificate from the competent authority for approval of the prior

leave request. The prior leave request will then be converted to official leave and an endorsement will be issued by the Committee, based on which the student becomes eligible for the Compensatory Assignment Test.

- ❖ Any intimation after the completion of regular Assignment Tests and/or Non submission of report/certificate will be considered as absent for the Assignment Test and the student will be awarded ZERO marks in the respective Assignment Tests. No further requests will be entertained in this regard.
- ❖ The committee headed by Principal and two Professors as members will scrutinize the request of the student, if genuine, the prior leave request will be converted into official leave.
- ❖ The Compensatory Assignment Test is not to be treated as an improvement Assignment Test, rather it is to be treated as an opportunity provided to student to make good of academic loss due to the reasons as cited above.

## **22 GRANT OF ATTENDANCE BENEFIT**

Grant of attendance on medical grounds/ participation in important Curricular/ Co-Curricular/ Extra – Curricular activities/ Off Campus Placements.

The Students shall put in a minimum attendance of 75% from all the courses put together offered during a semester subjected to a minimum of 40% in each course to become eligible for appearing in semester end examinations.

However, the cases of students who participate in various important Curricular/ Co- Curricular/ Extra – Curricular activities organized at University/ State/ National/ International levels/ Off Campus Placements representing the college shall be considered and given due consideration for attendance benefit.

The benefit of attendance may be allowed only on the basis of production of a certificate from organizer of the event.

However, the total period of absence in case of state/national level sports events is 30 days and the period of absence in international sports events is 45 days including the Journey period in an academic year as the UGC letter dated 18-08-1994.

The committee headed by Principal and two professors as a members, will scrutinize the request of the student for grant of attendance, if genuine, the request will be considered.

## **23 OTHER MATTERS**

1. Scribe facility is extended to B Tech students strictly following the guidelines issued under F. No. 16-110/2003-DD.III dt 26-02-2013 by the Ministry of Social Justice and Empowerment, Department of Disability Affairs, Govt. of India.
2. Students who are suffering from contagious diseases are not allowed to appear either continuous assessment or semester end examinations.
3. The students who participated in coaching/tournaments held at State/ National/ International levels through University / Indian Olympic Association during semester end examination period will be promoted to subsequent semesters till the entire program is completed as per the guidelines of University Grants Commission Letter No. F.1-5/88 (SPE/PES), dated 18-08-1994.
4. Based on recommendations of HOD & Principal, exemption from attending the class

work will be given to those students who secure placement and intend to join as the employer in VIII semester of B.Tech.

Special Continuous Evaluation (Assignment Tests, Sessional, etc.,) will be arranged to such candidates separately if necessary.

However, they shall appear for Semester End Examinations as per the Academic Calendar

5. The Principal shall deal with any academic problem, which is not covered under these rules and regulations, in consultation with the Heads of the Departments in an appropriate manner, and subsequently such actions shall be placed before the academic council for ratification. Any emergency modification of regulation, approved in the Heads of the Departments Meetings, shall be reported to the academic council for ratification.

## **24 AMENDMENTS TO REGULATIONS**

The Academic Council may, from time to time, revise, amend or change the regulations, schemes of examination and/or syllabi.

Oratory  
**PRINCIPAL**

**SCALE OF PUNISHMENT TO DEFAULTERS WHO INDULGE IN MALPRACTICE  
CASES AT YEAR END/ SEMESTER END EXAMS**

1. Any action on the part of a candidate at an Examination trying to get undue advantage in the performance in the examination or trying to help another, derive the same through unfair means is punishable according to the provisions contained hereunder. The involvement of the staff (who are in charge of conducting examinations, valuing examination papers and preparing / keeping records and documents relating to the examinations) in such acts (inclusive of providing incorrect or misleading information) that infringe the course of natural justice to one and all concerned at the examinations shall be viewed seriously and recommended for award of appropriate punishment. In case of persons who do not fall within the ambit of these rules for applicability, the cases shall be reported to the police for taking appropriate steps to deal as per the laws of the land.
2. In the rules to follow, the year means the examination year (i.e. the period between two regular examinations, for a course of one academic year), and for some courses examinations may be held twice. In such a year in the name of one regular and one supplementary examination (i.e. March and September examinations) when the candidate has two chances in a year.
3. Cancellation of the performance of a candidate at an examination and disqualification from appearing at the examination for a specific period would refer to all papers in all years of study of the candidate for which he/she has registered or is due to register for appearing at the examinations (including practical and viva-voce examinations).
4. a) COLLEGE herein means Velagapudi Rama Krishna Siddhartha Engineering College, Vijayawada, A.P  
b) MEC Means MALPRACTICE ENQUIRY COMMITTEE.  
c) CS Means Chief Superintendent.  
d) Year End/ Semester End Examinations mean Examinations conducted at the end of Academic year or at the end of each semester.  
e) SMP means Suspected Malpractice.  
f) EXAMINATION means Theory/ Practical/ Project.
5. Whenever a candidate is suspected to be resorting to malpractice at the time of taking the examination at the centre, the candidate is to be booked by the Squad/ by the Observers/ CS/ any other college Staff or Officer On Duty, under SMP case following scrupulously the instructions given by the Academic Council, V R Siddhartha Engineering College, Vijayawada, in processing such cases. Under any circumstances, the candidate shall not be allowed to continue writing the paper; however, the Chief Superintendent, shall permit him/ her for the rest of the papers on subsequent days at the current session of examinations only when the candidate is not involved in serious offences such as copying from the forbidden material, inserting papers with answers written by others or written by him outside, involving in impersonation case, exchanging answer papers in the hall, showing disrespect towards or assaulting the supervising personnel or acting in any manner that his presence is not conducive to maintaining discipline in the Examination Hall. The permission given by Chief Superintendent to appear at subsequent examinations does not guarantee the candidate that his answer scripts will be valued or result announced which is, however, subject to the final decision of the MEC, constituted by Principal of V.R. Siddhartha Engineering College, Vijayawada in the case already

booked.

Since the candidate does not complete answering the paper at the time of booking the case, the CS/ Observer/ Squad Leader must ensure the Malpractice being reported is atleast of the order that can be awarded a punishment not less than cancellation of performance of that paper as per the application of the rules. It means that the CS/ Observer/ Squad Leader is imposing on his/her responsibility a punishment of cancellation of performance of the paper on the prima facie evidence. A benefit of doubt, if any, shall be passed on to the candidatelest it should affect his career.

<b><u>NATURE OF OFFENCE/ MALPRACTICE</u></b>	<b><u>SCALE OF PUNISHMENT</u></b>
<p>1) Found in possession of any material relevant or related to the subject of examination (even when present in a coded form)</p> <p>a) Written, typed or printed or Xeroxed in any form; matter relevant or related to the subject or Question Paper on clothes worn or possessed on any part of the body (other than palm) or pad or hall ticket or single or multiple papers, vanity bag or purse or any other instrument normally permitted into hall.</p> <p>b) A Candidate found copying or has copied from the forbidden material. (the copied portion in the answer book is to be marked and signed by the invigilators and chief superintendent)</p> <p>c) Matter (A Question or Answer to a Question in the paper or anything related to the subject) written on his/her own question paper or on the palm. The matter available on the palm should be transferred onto a paper and should be attested by the Invigilator &amp; Chief Superintendent as a piece of evidence.</p> <p>d) If matter written on a desk or wall is established to be in the handwriting of candidate in the examination hall (the evidence has to be established). Even if the matter is in somebody's handwriting taking into account the nearness and circumstantial evidences the invigilating staff is empowered to book the case.</p>	<p>i) Expulsion from the examination hall and cancellation of performance of the candidate in all papers at the current session of examinations if the matter copied into the answer book is relevant to the Question Paper.</p> <p>ii) Expulsion from the examination hall and cancellation of performance of the candidate in all papers attempted up to the current exam, at the current session of examinations if the forbidden material is relevant to the question paper but not</p> <p>iii) Expulsion from the examination hall and cancellation of performance of the candidate in the current paper at the current session of examinations if the matter copied in to the answer script is not relevant to Question Paper or if the matter is not copied at all. copied into the answer script.</p>
<p>2) i) Possession of a calculator knowingly or unknowingly other than prescribed or permitted at an examination.</p> <p>ii) Possession of a Cell phone/ IPod/ organizer or any other electronic device knowingly or unknowingly other than prescribed or permitted at an examination.</p> <p>iii) Communicates through cell phone with any candidate or persons in or outside the exam hall in respect of any matter.</p>	<p>For the Malpractice cases (i) and (ii) Expulsion from the exam hall and cancellation in the current paper.</p> <p>Expulsion from the exam hall and cancellation in all the papers of the current examination.</p>

3) Destruction or supervision of evidence in any way like swallowing, tearing or throwing out etc.	Expulsion from the hall, cancellation of performance in all papers of the current examination.
4) Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods.	Expulsion from the exam hall, cancellation of the performance in the current paper.
5) If the rendering of assistance is through transfer or exchange of answer book/ additional book, both candidates are to be punished whether copying has taken place or not. a) Where exchange is involved from both sides. b) Where one candidate has transferred his paper to the second candidate without receiving paper in exchange.	Expulsion from the hall, cancellation of performance in all papers at the current exams for both candidates. The first candidate giving the paper to the other is awarded the punishment of cancellation of current paper at the current exams, while the second candidate is awarded punishment of cancellation of the all papers.
6) a) Main/ Additional Answer books printed outside found with candidate b) Forged signature of invigilator	Expulsion from college by issuing Transfer Certificate and informing to Police.
7) i) Insertion of main or additional book detected during examination time/ during valuation. ii) Influencing the examiner/ invigilator or staff of college examination cell directly or through agents to get undue benefit.	Wherever applicable, the candidate is expelled from the hall. Cancellation of performance of the candidate at the current series of exams and disqualification from appearing any year end / semester end college exams for 1 year.
8) Consulting books or papers or persons outside the hall before handling over the paper (e.g. going on the plea of easing etc.).	Expulsion from hall, series debarment from the rest of current exams.
9) a) Candidates writing irrelevant matter or making markings or writing names/ initials/ register number on the additional book etc. b) Making request to award pass etc. c) Writing objectionable, abusive or offensive language in the answer paper or in letters to the examiner.	Cancellation of the performance in that paper at the current examination.
10) i) Taking away the Answer Book (even if it is returned later) or leaving the hall without handling over the answer script or tearing away the answer book. ii) Sending out or throwing out question paper or answer paper or any kind of paper/ object on which some questions or answers or related matter are written	Expulsion from the hall, cancellation of performance in all papers of current exams and disqualification from appearing any year end/ semester end college examinations under autonomous status for one year.

with the intention of getting or giving help	
11) Abuses, threats, disrespect (either by oral or written or by signs) to invigilating and supervising staff within the premises or outside. a) Comes in drunken condition to the examination hall. Causing damage to invigilator or college property	Expulsion from the hall, debarment for the rest of exams and disqualification from appearing any year end/ semester end examinations for 1-2 years depending on the nature of misconduct.  Same as in 11, In addition Handing over to police depending on the severity.
12) If the candidate 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. If the imposter is an outsider, he will hand over to the police and a case is registered against him  The performance of the original candidate, who has been impersonated, shall be cancelled in all the subjects of the examination (including practical 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 semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
13) Physical assault on Examination personnel or college supervising staff a) Possess any lethal weapon or firearm in the examination hall	Permanent debarment from appearing any year end/ semester end exams. Permanent debarment from the college with a remark in TC and handing over to police.
14) Presentation of records of another candidate at the practical examination.	Cancellation of performance of the candidate in the current practical exam.
15) A Candidate is found guilty for more than one time at the current or earlier examinations.	Disqualification from appearing at any year end/ semester end examination for 1 year.
16) Involvement of Chief Superintendent, Principal, Invigilators, Teachers and other Staff in the leakage of question paper or meddling with answer books, selling or giving examination stationery for use outside the hall.	Suspension from service following accepted procedures and disciplinary action depending on the seriousness of offence. Decision of the college management & MEC is final.

17) Obstruction of the Controller of examination or Observer or Squad from doing the duty at the examination centre by any staff member(s).	Loss of increment with entry in the SR of the person/ persons causing obstruction for one year.
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- 18 a) Chief Superintendent and Assistant Superintendents who have reasons to suspect misconduct on the part of any candidate or candidates should forthwith make all possible preliminary investigation and communicate with the Principal or his nominee immediately, forwarding all material evidence available, together with the answer book (e.g. SMP Proforma, report of the squad, invigilators report, statement of issue of main answer books and additional books to candidates in the hall, seating arrangement and other relevant material or record) and the written explanation of the candidate. All such communications shall be sent through an authorized person on the same day, addressed to the Controller of Examinations or his nominee by name.
- b) In all such cases, the candidate or the candidates involved shall be sent out of the hall forthwith and kept out from writing the paper on the day, but before the candidate or candidates actually leaves or leave the premises, his or their explanation shall be taken in writing and forwarded to the Controller of examinations along with the report setting forth in detail all the material evidence. The address to which further communications are to be sent shall be obtained from the candidate.
- c) In all such cases of a suspected nature, the chief superintendents shall ordinarily permit the candidate in question to continue sitting for the subsequent papers at current examination except in cases of serious offences (e.g. when the candidate has not actually copied or inserted papers or reacted violently or shown disrespect to the supervising personnel or involved in impersonation).
- d) In case the candidate refuses to give a statement he is not to be forced to do so, only the fact of his refusal shall be recorded by the superintendent/ observer/ flying squad member and attested by one of the members of the supervisory staff on duty at the time of occurrence. In this case of the person who commits an offence under any of these rules but is not a candidate for any year end/ semester end examinations the chief superintendent may hand over the case to the police. Where a candidate/ invigilating staff is alleged to have employed/ promoted unfair means/ violated year end/ semester end examination conducted by the college under autonomous scheme, be given an opportunity, through a letter/ telegram to explain the misconduct or violation of examination rules. If such explanation is not received within the stipulated period, the Controller of examinations shall proceed with the case as per the accepted legal provisions.

19) Other items, if any, covered by the above rules.

The MEC is to make specific recommendations taking into account the circumstances, evidences and gravity of offence.

If the MEC comes to the conclusion basing on circumstantial evidences that a person has resorted to malpractice despite some procedural lapses in reporting by the supervising staff concerned, the case is to be decided according to the rules prescribed above.