

### **Definitions of Keywords**

The following are the definitions/descriptions that have been followed for the different terms used in the Regulations of B.E./B.Tech. Programs:

- 1) Program: This is an educational program in a particular stream/ branch of Engineering/branch of specialization leading to the award of the Degree. It involves events/activities, comprising of lectures/tutorials/laboratory work/fieldwork/outreach activities/project work/vocational training/viva-voce/ seminars/ internship/assignments/ presentations/ self-study etc., or a combination of some of these.
- **2) Branch:** Means Specialization or discipline of B.E./B. Tech. Degree Programme, like Civil Engineering, Mechanical Engineering, Electrical Engineering, and Textile Engineering, etc.
- **Semester:** Refers to one of the two sessions of an academic year (vide: serial number 4), each session being of sixteen weeks duration (with not less than 90 working days). The odd and even semesters shall be as per the University academic calendar.
- **4) Academic Year:** Refers to the sessions of two consecutive semesters (odd followed by an even) including periods of vacation.
- 5) Course: Usually referred to as subject and is a component of a Programme. All Courses need not carry the same weightage. The Courses should define learning objectives and learning outcomes. A Course may be designed to comprise lectures/ tutorials/ laboratory work/ fieldwork/ outreach activities/project work/ vocational training/ viva-voce/ seminars/ term papers/assignments/ presentations/ self-study etc., or a combination of some of these.
- 6) Credit: Refers to a unit by which the Course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of lecture or two hours of laboratory/practical Courses/ tutorials/ ffieldworketc., per week.
- **7) Audit Courses:** This means the Knowledge/ Skill enhancing Courses without the benefit of credit for a Course.
- 8) Choice Based Credit System (CBCS): Refers to customizing the Course work, through Core, Elective, and skill-based Ability Enhancement Courses to provide the necessary support for the students to achieve their goals.
- **9) Course Registration:** Refers to formal registration of the Courses in the study in every semester (Credits and Audit) by every student under the supervision of a Faculty Advisor (also called Mentor, Counsellor, etc.) in the Institution to maintain the proper record.



- **10) Continuous Internal Evaluation (CIE):** Refers to the evaluation of students' performance in the learning process. CIE shall be by the Course Instructor and may include tests, homework, problem-solving, group discussion, quiz, mini-project, and seminar throughout the semester, with a weightage for the different components being fixed by the University.
- **11) Semester End Examinations Evaluation (SEE):** Refers to the examinations conducted by the University covering the entire Course Syllabus. For this purpose, Syllabi to be modularized and SEE questions to be set from each module.
- **12) Course Evaluation:** Means Continuous Internal Evaluation (CIE) and Semester End Examination Evaluation (SEE) with equal weightage for each course (CIE: SEE = 50:50). Course to be evaluated for 100 marks, irrespective of its Credits.
- **13) First Attempt:** Refers to a student who has completed attendance requirements and CIE requirements has become eligible to attend the SEE and has attended at least one head of passing. SEE, such attempt shall be considered as the first attempt.
- **14) Credit-Based System (CBS):** Refers to quantification of Course work (by credits and quantification of contact hours). Under CBS, the requirement for awarding a degree is prescribed in terms of the total number of credits to be earned by the students with pass grades in all the courses and obtaining a minimum CGPA of 5, completing NCMC courses, AICTE activity points.
- **15) Credit Representation:** Refers to the Credit Values for different academic activities considered, as per Table-1. Credits for the seminar, project phases, project viva–voce and internship shall be as specified in the Scheme of Teaching and Examinations.
- 16) Non-Credit Mandatory Course (NCMC): In the non-credit mandatory courses, students shall attend the classes during the respective semesters to complete all the formalities of the course and appear for the Continuous Internal Evaluation (CIE). In case, any student fails to register for the said course/fails to secure the minimum 40% of the prescribed CIE marks, he/she shall be deemed to have secured an F grade. In such a case, the student has to fulfill the requirements during subsequent semester/s to appear for CIE. These Courses shall not be considered for CGPA calculation and vertical progression; but completion of the courses shall be mandatory for the award of degree.
- **17) Universal Human Value Course:** The courses which teach: a holistic perspective based on self-exploration about themselves (human beings), family, society, and nature.



Understanding (or developing clarity) of the harmony in the human being, family, society, and nature.

### 18) Calculation of Credits:

Table 1: Credit Values					
Theory/Lectures (L) (hours/week/Semest	Tutorials (T) (hours/week/Semest	Laboratory/ Practical (P)	Credits (L:T:P)	Total Credits	
er)	er)	(hours/week /Semester)	S		
4	0	0	4:0:0	4	
3	0	2	3:0:1	4	
2	2	2	2:1:1	4	
3	0	0	3:0:0	3	
2	2	0	2:1:0	3	
2	0	2	2:0:1	3	
0	0	6	0:0:3	3	
2	0	0	2:0:0	2	
1	0	0	1:0:0	1	
0	2	0	0:1:0	1	
0	-\//	1	0:0.5:0.5	1	
0	0	2	0:0:1	1	

**NOTE:** Activities like practical training, study tour, and participation in Guest lecturers do not carry Credits.

**19) Grading:** Grade refers to a qualitative measure of performance of a student in each course, based on the percentage of marks secured in CIE and SEE put together. Grading is done by Absolute Grading. The rubrics attached to letter grades are as follows:

**S** – Outstanding, **A** – Excellent, **B** – Very Good, **C** – Good, **D** – Above Average, **E** – Average, and **F** – Fail.

It is an index of the performance of students in a said course. Grades are denoted by letters S, A, B, C, D, E, and F.



**20) Grade Point (GP):** Refers to a numerical weightage allotted to each letter grade on a 10-point scale as under.

Letter Gra	Letter Grade and corresponding Grade Points on a typical 10 - Point scale						
Letter	S	A	В	С	D	E	F
Grade Point	10	09	08	07	06	04	00

- **21) Passing Standards:** Refers to passing a Course only when GP is greater than or equal to 04.
- **22) Credit Point:** This is the product of GP and number of credits for a Course i.e., Credit points (CrP) =  $GP \times Credits$  for the Course.
- **23) Semester Grade Point Average (SGPA):** Refers to the measure of academic performance of a student in a semester.
- **24) Cumulative Grade Point Average (CGPA):** This is a measure of the cumulative performance of a student at higher semester and is computed from the 2<sup>nd</sup> semester onwards.
- **25) Grade Card:** Refers to the certificate showing the grades earned by a student. A grade card shall be issued to all the registered students after every semester-end examination. The grade card will display the Program details (Course code, title, number of credits, grades secured, number of attempts and alternate subject taken in lieu of successive failure after 4 attempts) along with the SGPA of that semester and CGPA (except for the first semester) earned till that semester.
- **26) University:** Visvesvaraya Technological University (VTU), Belagavi.





210D1 0	Title and Credits of the Program of Study.		
210B1.0	210B1.1	The Program of study shall be called the degree of Bachelor of	
		Engineering/Bachelor of Technology, abbreviated as B.E./B.Tech.	
	210B1.2	Prescribed Number of Credits for the Program	
		(a) The total number of credits to be completed by students admitted to the	
		first semester of 04 years B.E./B. Tech., program shall be <b>160</b> .	
		<b>(b)</b> The total number of credits to be completed by students admitted to the	
		third semester of 04 years B.E./B. Tech., program under lateral entry	
		scheme shall be <b>120</b> .	
		(c) A student shall be eligible to get an Undergraduate degree with <b>Honours</b>	
		/ Minors, if he/she earns additional 18 credits, as per VTU norms issued	
		from time to time regarding the earning of additional credits [To be	
		read along with Regulations Governing the Award of Honours /	
		Minors in B.E./B. Tech., Degree Programs].	
	210B1.3	(a) Definition of Credits:	
		1. 1-hour Lecture (L) per week per semester =1 Credit	
		2. 2 hours Tutorial (T)per week per semester =1 Credit	
		3. 2 hours Practical/Laboratory/Drawing (P) per week per semester	
		=1 Credit.	
		4. Four-credit theory courses shall be designed for a minimum of 50 hours of the Teaching-Learning process.	
		5. Three-credit theory courses shall be designed for a minimum of 40	
		hours of the Teaching-Learning process.	
		6. Two-credit theory courses shall be designed for a minimum of 25	
		hours of the Teaching-Learning process	
		7. One credit theory course shall be designed for a minimum of 15 hours of the Teaching-Learning process	
		nours of the reaching-Learning process	
210B2.0	Academic F	ligibility for admission	
	210B2.1	Regular Engineering College Eligibility: For candidates who have	
		Passed Second PUC or equivalent	
		I. As notified by the Government of Karnataka from time to time	
		II. Those students, who have passed a qualifying examination other than	
		the PUC II examination of the Pre-University Education Board of	
		Karnataka, have to obtain an eligibility certificate for seeking admission	
		to B.E./B. Tech. Degree Program from Visvesvaraya Technological	
		University, Belagavi.	
	210B2.2	Lateral Entry: Regular Engineering College Eligibility: For candidates	
		who have Passed 3-year Diploma	



- I. As notified by the Government of Karnataka and/ or as notified by Karnataka Examinations Authority from time to time and in an allied branch of Engineering (as notified by the Government of Karnataka for admission to 3rd-semester B.E./B. Tech.)
- II. Those candidates who have completed Engineering Diploma from other than Karnataka state shall provide the Equivalence/ Eligibility Certificate issued from the Director of Technical Education, Karnataka.

#### 210B2.3

Lateral Entry: Evening Engineering College (For Candidates who have Passed 3-year Diploma):
Eligibility:

- I. As notified by the Government of Karnataka and/ or as notified by Karnataka Examinations Authority from time to time and in an allied branch of Engineering (as notified by the Government of Karnataka for admission to 3rd-semester B.E./B. Tech.)
- II. Those candidates who have completed Engineering Diploma from other than Karnataka state shall provide the Equivalence/ Eligibility Certificate issued from the Director of Technical Education, Karnataka.
- In addition to this, a candidate after passing the diploma must have a minimum of two years' full-time work experience as of 1st September of the year of admission, in a registered firm / Company / Industry / Educational Institution Government / Autonomous Organizations in an allied branch of Engineering / Technology, in which the candidates hold a diploma and in which admission is sought by him/her.
- Professional experience refers to the experience earned as an employee on regular basis in Government, Government Undertaking, Public Sector Undertaking, Corporation or Private company registered under the Directorate of Industries and Commerce or the Directorate of Small Scale Industries or Government recognized Institutions as technical staff.

Period of apprenticeship undergone shall also be treated as professional experience, if sponsored by the Board of Apprenticeship Training, Southern Region, Chennai or by Government, Government Undertakings and Public Sector Undertakings.

**Note:** In the case where the genuineness of the employment certificate is questionable, such candidates have to produce supporting documents specifying the registration details of the Industry / Company (e.g., SSI Registration) and or identity cards provided to them together with the latest



		colory contificate and provident fund contificate Hayroven the employer has
		salary certificate and provident fund certificate. However, the employer has
		to fill up the NOC duly signed by the organization/company authority.
	210B2.4	Lateral Entry: Regular Engineering College Eligibility: For candidates
	21002.1	who have passed B.Sc., Degree
		As notified by the Government of Karnataka and/ or as notified by
		Karnataka Examination Authority from time to time for admission 3 <sup>rd</sup> -
		semester B.E./B. Tech, programs
	210B2.5	Qualification earned from foreign countries:
		With regard to the qualification earned from foreign countries, an
		equivalence certificate from the University/ Association of Indian
		Universities is mandatory for admission to B.E./B. Tech. Programs. In case of
		any dispute about the equivalence in qualification earned from foreign
		countries, the decision of the University Equivalence Committee shall be
		final in establishing the eligibility of the student.
210B3.0	Minimum a	and Maximum Duration of the program
	210B3.1	Minimum duration: For students admitted to the first semester of
		<b>B.E./B. Tech.</b> , the minimum duration of the program shall be four academic
		years (divided into eight semesters). The actual Teaching and Learning days
		shall be for at least 90 working days in a semester.
		Maximum Duration: Students admitted to first-semester B.E./B. Tech. shall
		complete the program within eight academic years from the <b>year</b> of the first
		admission, failing which they will not be eligible for the award of degree.
	210B3.2	Minimum duration: For students admitted to the third semester of
		B.E./B. Tech., the minimum duration of the program shall be three
		academic years (divided into six semesters). The actual Teaching and
		Learning days shall be at least 90 working days in a semester.
		Maximum Duration: Students admitted to third semester B.E./ B. Tech.,
		shall complete the program within six academic years from the <b>year</b> of the
		first admission, failing which they will not be eligible for the award of
		degree.
	210B3.3	Minimum duration: The Program (conducted during the evening) to
		which students are admitted to the third semester of B.E./B. Tech., Program
		under lateral entry scheme shall be of three academic year duration, divided
		into six semesters. The actual Teaching and Learning days shall be for at
		least 90 working days in a semester.
		<b>Maximum Duration:</b> Students admitted to third semester B.E./ B. Tech.,
		shall complete the Program (conducted during the evening) within six



		academic years from the <b>year</b> of the first admission, failing which they will
		not be eligible for the award of degree.
	210B3.4	The deficit contact hours of the Program, conducted on all working days
		shall be compensated by working on all Sundays (except on general
		holidays).
210B4.0	•••	d course registration
	210B4.1	There shall be the following types of Courses:
		(a) Humanities, Social Sciences, and Management Courses (HSMC):
		These are mandatory for all disciplines.
		(b) Basic Science Courses ( <b>BSC</b> ): Physics, Chemistry, and Mathematics.
		These are mandatory for all disciplines.
		(c) Engineering Science Courses ( <b>ESC</b> ): Materials, Workshop, Drawing,
		and Basics of Electrical/ Electronics/ Civil/ Mechanical/ Computer
		Engineering, etc. These are mandatory for all disciplines.
		(d) Professional Core Courses (PCC) - Core: Are the professional Core
		Courses, relevant to the chosen specialization/ branch. The core
		courses are to be compulsorily studied by students and it is
		mandatory to complete them to fulfill the requirements of a
		Program.
		(e) Professional Elective Courses (PEC): Are professional Electives,
		relevant to the chosen specialization/branch and can be chosen
		from the pool of courses. It shall be supportive to the discipline
		providing extended scope/enabling exposure to some other
		discipline /domain and nurturing student proficiency skills
		(f) Open Elective Courses (OEC): Are the Elective Courses from other
		technical areas and/ or from emerging fields. Students of other
		departments will opt these courses subject to fulfilling of eligibility
		as stipulated by the Regulation.
		(g) Integrated Professional Core Course (IPCC): It refers to
		Professional Theory Core Course Integrated with Practical of the
		same course. Credit for IPCC can be 04 considering L: T: P as 3:0:2
		or L:T:P as 2:2:2. For an IPCC, the theory component shall be
		evaluated by both CIE and SEE, and the practical component is
		evaluated by CIE only (there shall be no semester-end examination
		(SEE) for the practical component).
		(h) Project Work: Mini-project work and Major Project work carried out
		at the parent Institution or any recognized organization without
		affecting the regular class work.
		(i) Seminar: Deliverable at the Institution under the supervision of a



	faculty coordinator.
	(j) Internship (INT): Preferably at an industry/ R and D organization/IT company /Government organization /any recognized organization of significant repute for a specified period as mentioned in Scheme of Teaching and Examinations.
	(k) Non-Credit Mandatory Courses ( <b>NCMC</b> ): These Courses are mandatory, without the benefit of a grade or credit, for students admitted to B.E./B. Tech. Program. A pass in each mandatory Course is required to qualify for the award of degree.
	(l) Ability Enhancement Courses (AEC): Ability Enhancement Courses are based upon the content that leads to Knowledge enhancement.
	(m) Universal Human Values Courses (UHV): The courses which teach: a holistic perspective based on self-exploration about themselves (human being), family, society, and nature. Understanding (or developing clarity) of the harmony in the human being, family, society, and nature. These are mandatory for all disciplines
210B4.2	Course Registration:
	In order to maintain a proper academic record of each student at the Institution, every student shall register for the Courses of a semester (Credit/Audit) under the supervision of a Faculty Advisor (also called Mentor, Counselor, etc.,) at the beginning of each semester.
210B4.3	The minimum number of students registered to any Elective Course offered by the Departments shall not be less than ten.  However, the above condition shall not apply to Programs having a class strength of less than 10. In such cases, only one elective course shall be offered.
	If the strength of students who are opting for a particular elective is less than 5, the college must seek permission from the Registrar (Evaluation) within 15 days from the date of commencement of the semester as per the academic calendar of the University, if that elective is to be offered in that college.
	If more number of students are opting for the same elective, it shall be offered on a first come first serve basis, up to one division i.e. 60 students. If the department has the facility to offer the same elective for another division, it may do so else the students must opt for a different elective, depending on the strength of the division.



	210B4.4	A student shall exercise the option in respect of Elective Course/s and
	_	register for the same at the end of the previous semester. However, the
		student may be permitted to opt for a change of Elective Course/s within 15
		days from the date of commencement of the semester as per the academic
		calendar of the University.
210B5.0	Attendance	Requirement
	210B5.1	Each semester shall be considered as a unit for the calculation of attendance.
		Candidates have to put in a minimum of attendance of 75% in each Course
		with a provision for condoning up to 5% of the attendance by the Vice-
		Chancellor on the specific recommendations of the Principal of the
		college where the candidate is studying, based on medical grounds,
		participation in University / State / National / International level sports
		and cultural activities, seminars, workshops, paper presentation, etc., of
		significant value. The supporting documents for condoning the shortage of
		attendance shall be submitted through the office of the Principal along with
		the recommendations to the office of the Registrar (Evaluation).
	210B5.2	a) The basis for the calculation of attendance shall be the period prescribed
		by the University by its academic calendar of events and as notified by
		the Registrar.
		<b>b)</b> In case of late admissions, approved by competent authority
		(KEA/DTE/VTU), to I semester (for the regular scheme) and III
		semesters (for lateral entry scheme) of Engineering Program, the
	24005 2	attendance shall be reckoned from the date of admission to the Program.
	210B5.3	The Course Instructor/ Mentor/ also College shall inform the students as
		well as their parents /guardians about the attendance status every month.
		Students who are facing a shortage of attendance shall be mentored to
		make up for the shortage. The principal shall also notify every month, the list of candidates who are falling short of required attendance.
	210B5.4	A student who does not satisfy the attendance requirement in one or more
	21023.1	Courses (including bridge courses for lateral entry students) shall not
		be eligible to appear for the Semester End Examinations (SEE) of that
		course(s). The candidate shall be required to repeat that course during the
		subsequent semester(s).
210B6.0	Internship	
	210B6.1	Internship:
		The internship is an extended period of work experience undertaken by
		university/Institute students looking to supplement their degree with
		professional development. The students are allowed to prepare themselves
		for the workplace and develop practical skills as well as academic ones.
		The Internship shall be completed during the period specified in the Scheme
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of Teaching and Examinations. There will be three internships:

#### Part A:

**Summer Internship-I:** All students admitted to engineering programs shall have to undergo a mandatory summer internship of **03 weeks** during the intervening vacation of II and III semesters. Summer Internship shall include Inter / Intra Institutional activities. University Viva-Voce examination (Presentation followed by question-answer session) shall be conducted during III semesters and the prescribed credit shall be included in III semester.

- 1) Summer Internship-I (for Lateral Entry students): All the students admitted to engineering programs under the lateral entry category shall have to undergo a mandatory summer Internship-I of 03weeks during the intervening vacation of III and IV semesters. Summer Internship shall include Inter / Intra Institutional activities. University Viva-voce examination shall be conducted during the IV semester examinations and the prescribed credit earned after successful completion of the course shall be included in the III semester grade card. The III semester grade card shall be issued only after passing the courses
- **2) Summer Internship II**: At the end of the **fourth** Semester **04 weeks** Summer Internship shall be carried out–based on industrial / Govt./NGO/MSME / Rural Internship/Innovation/Entrepreneurship. University Viva-voce examination (Presentation followed by question-answer session) shall be conducted during the V semester and the prescribed credit shall be included in the V semester grade card.
- 3) Research / Industry Internship: At the end of the sixth / Seventh semester (in two cycles to accommodate all the students of the University) Research/Industrial Internship shall be carried out Based on industrial/ Govt./ NGO/ MSME/ Rural internship / Innovation / Entrepreneurship. All the students admitted shall have to undergo a mandatory internship of 24 weeks during the vacation of VI / VII semesters. University Viva-Voce examination shall be conducted during VII / VIII semester and the prescribed credit shall be included in VII / VIII semester.

**Research internship** Students have to take up research internships at Centers of Excellence (CoE) / Study Centers established in the same institute and /or out of the institute at reputed research organizations / Institutes.



**Industry internship**: This is an extended period of work experience undertaken by University students looking to supplement their degree with professional development. The students are allowed to prepare themselves for the workplace and develop practical skills as well as academic ones.

The internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take up / complete the internship shall be declared fail and shall have to complete it during subsequent University examination after satisfying the internship requirements. During subsequent semesters. (The faculty coordinator or mentor has to monitor the students' internship progress and interact to guide them for the successful completion of the internship.)

#### Part B:

- 1. The Department/college shall nominate staff member/s to facilitate, guide, and supervise students under internship.
- 2. The students shall report the progress of the internship to the Guide at regular intervals and seek his/her advice. The Guide shall maintain the progress record of the candidates undergoing internship.
- 3. After the completion of the Internship, students shall submit a report with a completion certificate to the Head of the Department with the approval of internal Guides.
- 4. There shall be **50** marks for CIE and **50** marks for SEE. The minimum requirement of CIE and SEE marks shall be 50 % of the maximum marks.
- 5. The internal Guide shall be the internal examiner for the SEE.
- 6. The external Guide for the Internship shall be the external examiner for SEE. Examination for internship shall be conducted at the college and the date shall be fixed in consultation with the external Guide. The Examiners shall jointly award the SEE marks.
- In case the external Guide expresses his/her inability to conduct the Examination, the Principal /Chief Superintendent of the Institute shall appoint a senior faculty of the Department to conduct the Examination along with the internal Guide.
- 8. Non-availability of Internal guide due to inevitable situations for the conduct of SEE, the Principal /Chief Superintendent of the respective institute shall appoint a senior faculty of the Department to conduct the Examination.
- 9. The students are permitted to carry out the internship anywhere in India or abroad. The University will not provide any financial assistance to any student for carrying out the Internship.

#### 210B7.0 Technical Seminar



	210B7.1	<b>Technical Seminar:</b> Technical Seminar is one of the heads of passing.
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		<ul> <li>i. Each candidate shall deliver a Technical seminar on the topic chosen from the relevant field/list provided by the department.</li> </ul>
210B8.0	210B8.1 210B8.2	<ul> <li>ii. The Head of the Department shall make arrangements for the conduct of seminars through concerned faculty members of the Department. The committee, constituted for the purpose by the Head of the Department, shall award the CIE marks for the seminar. The committee shall consist of two senior faculty members of the Department and the senior-most among them acting as the Chairperson.</li> <li>Mini-Project Work: Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary Mini-project can be assigned to an individual student or a group having not more than 4 students (A Mini Project is a laboratory-oriented course that will provide a platform to students to enhance their practical knowledge and skills by the development of small systems/applications).</li> <li>Major Project Work: Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary Major-project can be assigned to a group having not more than 4 students. The main project work needs to be taken up within the institute/ research laboratory/industry. It is desirable, that the outcome of the project work</li> </ul>
		may be published/patented.
210B9.0	÷	S Internal Evaluation (CIE)
	210B9.1 210B9.1a	Continuous Internal Evaluation Procedure:
	210D).1a	Theory Courses (03 Credits): Three Unit Tests each of 20 Marks (duration 01 hour)
		First test at the end of 5th week of the semester
		Second test at the end of the 10 <sup>th</sup> week of the semester
		Third test at the end of the 15 <sup>th</sup> week of the semester
	V	Two assignments each of <b>10 Marks</b>
		First assignment at the end of 4th week of the semester
		Second assignment at the end of 9th week of the semester
		Group discussion/ Seminar/ quiz any two of three suitably planned to attain the COs and POs for <b>20 Marks</b> (duration 01 hours)
		The sum of total marks of three tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be scaled down to 50 marks



### 210B9.1b Theory Integrated with practical Courses (TIPC) (4 Credits)

The CIE marks for the theory component of the TIPC shall be 30 marks and for the laboratory component 20 Marks.

### **CIE for the theory component of TIPC**

Three Unit Tests each of **20 Marks (duration 01 hour)** 

- First test at the end of 5<sup>th</sup> week of the semester
- Second test at the end of the 10<sup>th</sup> week of the semester
- Third test at the end of the 15<sup>th</sup> week of the semester

### Two assignments each of 10 Marks

- First assignment at the end of 4th week of the semester
- Second assignment at the end of 9th week of the semester

### CIE for the practical component of TIPC

- On completion of every experiment/program in the laboratory, the students shall be evaluated and marks shall be awarded on the same day. The 15 marks are for conducting the experiment and preparation of the laboratory record, the other 05 marks shall be for the test conducted at the end of the semester.
- The CIE marks awarded in the case of the Practical component shall be based on the continuous evaluation of the laboratory report. Each experiment report can be evaluated for 10 marks. Marks of all experiments' write-ups are added and scaled down to 15 marks.
- The laboratory test **(duration 03 hours)** at the end of the 15<sup>th</sup> week of the semester /after completion of all the experiments (whichever is early) shall be conducted for 50 marks and scaled down to 05 marks.

Scaled-down marks of write-up evaluations and test added, this will be CIE marks for laboratory component of TIPC for 20 **marks**.

- The minimum marks to be secured in CIE to appear for SEE shall be 15 in theory component and 10 in practical component. The laboratory component of the TIPC shall be for CIE only.
- The theory component of the TIPC shall be for both CIE and SEE



• In case, students satisfy the attendance requirement of both theory and laboratory components of the TIPC, but fail to secure the minimum CIE marks in any one of the two, such students shall not be permitted to appear for SEE of course.

#### 210B9.1c

### Theory Course with 01 credit

Three Unit Tests (preferably in MCQ pattern) each of **20 Marks (duration 01 hour**)

- 1. First test at the end of 5th week of the semester
- 2. Second test at the end of the 10th week of the semester
- 3. Third test at the end of the 15th week of the semester

Two assignments each of **10 Marks** 

- 4. First assignment at the end of 4th week of the semester
- 5. Second assignment at the end of 9th week of the semester

Quiz / Group discussion / Seminar, any two of three suitably planned to attain the COs and POs for **20 Marks** (**duration 01 hours**)

The sum of total marks of three tests, two assignments, and quiz / seminar / group discussion will be out of 100 marks and will be **scaled down to 50 marks** 

#### 210B9.1d

### Theory Course with 02 credits

CIE will same as 1 credits theory course for the 1<sup>st</sup> and 2<sup>nd</sup> semester, however for a higher semester depends upon the type of the course CIE may be non MCQ type or the same as other core theory courses.

CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the outcome defined for the course.

At the beginning of the semester, only the teacher has to announce the methods of CIE for the course.

The candidate shall write tests, assignments / unit-tests / written quizzes in Blue Books which shall be preserved by the Principal / Head of the Department for at least six months after the announcement of



	University results and shall be made available for verification as per the
	direction of the Registrar (Evaluation).
210B9.2	Engineering Graphics / Drawing / Field Works:
210B9.2a	Engineering Graphics / Drawing / Engineering Visualization Course
	1. The CIE marks awarded in the case of Drawing shall be based on the
	weekly evaluation of class work (sketching and computer-aided
	drawing) each drawing will be evaluated for marks as mentioned
	module-wise in the syllabus. Marks for all the drawing sheets are
	added and scaled down to <b>30 marks.</b>
	2. One class test similar to SEE will be conducted after completion of the
	syllabus for 100 marks and scaled down to 20 marks.
	3. CIE marks (out of 50) scored by the student is the sum of class work
	evaluation and test marks.
	The CIE marks awarded for higher semester Drawings/ Design Drawings
	offered by various branches shall be based on the evaluation of the sheets
	and one test in the ratio 80:20.
210B9.2b	Continuous Evaluation of Field Work
	Surveying Practice / Socio-Economics/ Marketing/traffic/ environmental
	survey
	CIE marks will be split into two components 80% of maximum marks (40
	marks) are given for fieldwork report evaluation and 20% of maximum
	marks (10 marks) for internal assessment test evaluation.
	Fieldwork evaluation includes attendance, data collection through survey,
	use of data for design drawing, and report. The split-up of marks for the
	report will be decided by the faculty who is guiding them for the design
	drawing and report. The criteria for split-up of marks shall be done to
	achieve the learning outcome of the course. The report evaluation shall be
	carried out for 100 marks and scored marks shall be scaled down to 40
	marks.
	The assessment shall be a presentation of the report followed by the viva-
	voce. This test will be conducted by the fieldwork project guide and
	fieldwork coordinator. If the fieldwork coordinator happens to be the same
	faculty then, HOD or HOD nominated senior faculty will conduct the test
	with the guide. A test similar to SEE will be conducted for 100 marks and
	marks scored by the student will be scaled down to 10 marks.
	The sum of the report and test marks will be total CIE marks for fieldwork.
210B9.3	Practical Courses:



CIE marks for the practical course is **50 Marks**.

The split-up of CIE marks for record/journal and test are in the ratio **60:40**.

- Each experiment to be evaluated for conduction with observation sheet and record write-up. Rubrics for the evaluation of the journal/write-up for hardware/software experiments designed by the faculty who is handling the laboratory session and is made known to students at the beginning of the practical session. (However, rubrics to be followed and split up of marks for CIE is suggested in **Annexure-I**)
- Record should contain all the specified experiments in the syllabus and each experiment write-up will be evaluated for 10 marks.
- Total marks scored by the students are scaled downed to 30 marks (60% of maximum marks).
- Weightage to be given for neatness and submission of record/write-up on time.
- Department shall conduct 02 tests for 100 marks, the first test shall be conducted after the 8<sup>th</sup> week of the semester and the second test shall be conducted after the 14<sup>th</sup> week of the semester.
- In each test, test write-up, conduction of experiment, acceptable result, and procedural knowledge will carry a weightage of 60% and the rest 40% for viva-voce.
- The suitable rubrics can be designed to evaluate each student's performance and learning ability (Split-up marks and Rubrics are suggested in **Annexure-I**).
- The average of 02 tests is scaled down to **20 marks** (40% of the maximum marks).

The Sum of scaled-down marks scored in the report write-up/journal and average marks of two tests is the total CIE marks scored by the student.

Internal tests for laboratory courses with software experiments will be conducted for 100 marks

Observation, write-up of procedure/ Algorithm / program, and execution of experiment will be assessed for 80 marks and Viva-voce for 20 marks.

Scored marks out of 100 is scaled down to 50 marks

#### 210B9.4

### Internship:

The Internship shall be completed during the period specified in the Scheme of Teaching and Examinations.

The Department / College shall nominate staff member/s to facilitate,



Guide, and supervise students under an internship.

The students shall report the progress of the internship to the Guide in regular intervals and seek his/her advice. The Guide shall maintain the progress record of the candidates undergoing internship.

### **Duration of Internships**

- Summer Internship-I 03 weeks
- Summer Internship-II 04 weeks
- Industry / Research Internship 24 weeks

CIE shall be carried out by the faculty **mentor/ guide** who is monitoring the progress of the internship of the student. Split up for CIE for report and viva-voce are in the ratio of 50:50

**Report evaluation** is common for all three internships and is evaluated for 50% maximum marks – The rubrics suggested for report evaluation will be based on the

- Report formatting, (20% of marks of CIE for report)
- presentation of the outcomes in the report (40% of marks for CIE for report) and
- Technical content of the report (40% of marks for CIE for report)

(weightage may be given for paper publication in reputed journal /refereed journal / Conferences / Product developed / Patent filed – only for Industry / Research Internship).

**Viva-Voce conducted** for 50% of marks of CIE. The rubrics suggested are

- For a demonstration of (soft) skills/Engineering Knowledge gained (50% of marks of CIE for Viva-voce).
- The question-answer session will be checked for the understanding of the fundamentals and concepts (40% of CIE marks for Viva-voce)
- Clarity in answering the questions (10% of CIE marks for Vivavoce)

Viva-voce will be conducted by the Mentor / guide and Head of the department /one of the senior faculty assigned by the head of the department



210B9.5	Technical Seminar:
<b>41007</b> 13	Technical Seminal.

The CIE marks awarded for Technical Seminar shall be based on the evaluation of the Seminar Report, Presentation skill, and Question and Answer session in the ratio of 50:25:25

Technical Seminar is one of the heads of passing.

Each candidate shall deliver a Technical seminar as per the Scheme of Teaching and Examinations on the topic chosen from the relevant field.

The Head of the Department shall make arrangements for the conduct of seminars through concerned faculty members of the Department. The **committee**, constituted for the purpose by the Head of the Department, shall award the CIE marks for the seminar. The committee shall consist of two senior faculty members of the Department and the senior-most acting as the Chairperson.

### Rubrics (split up of Marks) suggested

### Report

- Formatting of the report, (10 marks)
- Literature survey (20 Marks) and
- Technical content of the report (20 marks)

### Presentation skill

- Inference from the Literature survey (15 Marks)
- quality of the preparation and presentation (10 marks)

#### Viva-Voce

- Understanding of fundamentals and concepts (15 marks)
- The clarity in answering the questions (10 Marks)

### **210B9.6** Mini – Project:

The CIE marks awarded for Mini - Project, shall be based on the evaluation of the Mini-Project Report, Project Presentation skill, and Question and Answer session in the ratio of 50:25:25. The marks awarded for the Mini-Project report shall be the same for all the batch mates.

Marks allotted is 50 marks

50% marks of CIE for the report will be evaluated by the faculty guide



	/mentor who is guiding the mini-project.
	The Head of the Department shall make arrangements for the conduct of viva-voce evaluation of the mini-project. The committee shall consist of a guide/mentor and one senior faculty member of the Department
	Rubrics suggested as below-
	<ul> <li>Abstract-synopsis write up Selection of the topic and relevance of the subject to concerned discipline Problem identification (25 marks)</li> <li>Demonstration /presentation (10 marks)</li> <li>Viva-Voce (15 Marks)</li> <li>The marks awarded for the Mini-Project report shall be the same for all the batch mates.</li> </ul>
210B9.7	Major Project Work:
	The maximum marks for the CIE are 100 marks.
	<ul> <li>Marks to be awarded after evaluation in the ratio 50:25:25 for Report: Presentation skill: Question and Answer session.</li> <li>Marks awarded for 'Report' shall be the same for all the batch mates.</li> </ul>
	50% marks of CIE for the report will be by the faculty guide / mentor who guides the mini-project.
	The Head of the Department shall make arrangements for the conduct of viva-voce evaluation of the major-project. The committee shall consist of a guide / mentor and one senior faculty member of the Department.
	Rubrics to be followed for evaluation is suggested in <b>Annexure-II</b>
	The marks awarded for the Project report shall be the same for all the batch mates.
210B9.8	The CIE marks in the case of Internship I and II / Research Internship/Industrial Internship /Technical Seminar/ Mini-Project and Major-Project Work shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of them shall be the Guide.



210B9.9	Maximum and Minimum CIE and SEE marks for passing
	Maximum and Minimum CIE Marks:
	For all other theory Courses/Drawing courses of the Program, the maximum
	CIE marks shall be 50. To appear for the SEE, the minimum CIE marks to be
	secured shall be 40 % of the maximum marks i.e., 20 marks.
	For Practical / Fieldwork / Mini-project / Summer Internship-I and II / the
	maximum CIE marks shall be 50. To appear for the SEE, the minimum CIE
	marks to be secured shall be 50 % of the maximum marks i.e., 25 marks.
	For Research Internship/ Industry Internship / Major Project the maximum
	CIE marks shall be 100. To appear the SEE, the minimum CIE marks to be
	secured shall be 50% of the maximum marks i.e., 50 marks.
	For the seminar maximum, CIE marks shall be 100, minimum passing marks
	is 50% of the maximum marks i.e., 50 marks.
	Maximum and Minimum SEE Marks:
	For all other <b>theory Courses / drawing Courses</b> of the Program, the
	maximum SEE marks shall be 50. The minimum SEE marks to be secured
	shall be 35 % of the maximum marks i.e., 18 marks and in total 40 % of the
	Course maximum marks i.e., the sum of the CIE and SEE marks prescribed
	for the Course.
	For <b>Practical / Fieldwork / Summer Internship-I and II /</b> the maximum
	SEE marks shall be 50, the minimum SEE marks to be secured shall be 35 %
	of the maximum marks i.e., 18 marks.
	For Research Internship / Industry Internship / Major Project the
	maximum SEE marks shall be 100, the minimum SEE marks to be secured
	shall be 35% of the maximum marks i.e., 35 marks.
24.000.0	No SEE marks for Seminar and Mini-Project work.
210B9.9	Any corrections or overwriting of CIE marks on the blue book/drawing
	sheet shall bear the signature(s) of concerned Teacher(s) and in such cases,
	the Head of the Department shall indicate the number of corrections on
	every sheet at the footer margin of blue book/drawing sheet and attest it
210B9.10	with the signature of concerned faculty and HoD.
21007.10	CIE marks shall reach the University before the commencement of examinations as per the notification from the office of the Registrar
	examinations as per the notification from the office of the Registral



	(Evaluation) from time to time. After the submission of CIE marks to the University, any request under any circumstances for change of CIE marks shall not be considered.
210B9.11	<ul> <li>i. Students satisfying the attendance requirement but failing to secure the minimum percentage of CIE marks, in any Course/s, shall not be eligible for the SEE conducted by the University and they shall be considered as fail in that Course /those Courses. However, they can appear for University examinations conducted for other Courses of the same semester and backlog Course/s if any.</li> <li>ii. Students who have satisfied the attendance requirement but not the CIE</li> </ul>
	requirements shall be permitted to register afresh and appear for SEE after satisfying the CIE requirements in the same Course(s) when offered during subsequent semester/s.  iii. Each appearance to SEE OR absence after completing CIE and
	attendance requirement to complete a course shall be treated as an attempt.
210B9.12	CIE marks of those students, who come under 210B9.11(i) and (ii), shall also be sent to the Registrar (Evaluation) along with other course CIE Marks.
210B9.13	<ul> <li>i. The final list, incorporating corrections (if any), of CIE marks awarded to the students in the Theory / Practical / Internship / Technical Seminar / Mini – Project / Major-Project shall be displayed on the notice board of the college much before the closure of the semester.</li> </ul>
	ii. The college/institution shall enter the CIE marks of each semester in the format of the VTU online CIE marks portal and submit a certified copy of the same to the University Examination Section within the stipulated date notified by University. Every page of the CIE marks sheet
	(hardcopy) shall bear the signatures of the concerned Teacher/Teachers, Head of the Department, and Principal.
210B9.14	Moderation Committee for CIE;
	Moderation of assessment is an organized procedure that ensures the
	use of valid assessment methods and consistent application of
	criteria, to provide fair academic judgment and reliable outcomes in
	the form of marks or grades. It assures appropriate designing and implementation of assessment activities along with the generation of valid and reliable results.
	There shall be a Monitoring Committee for Internal Assessments in every Department, which shall be chaired by the Head of Department and two senior faculty members to be nominated by the Principal.



This Committee shall be responsible for the entire process of Internal Assessment in the Department, including redressal of grievances, if any.

#### OR

Each department should establish a moderation committee consisting of the Head of the department and 01 or 02 senior faculty of the department.

Following are the guideline for the moderation team-

Moderation may be conducted in case there is a large number of fail grades or high grades, or when large numbers of students who have received the same grade or clustering of students on letter grades, or when there are discrepancies between marks allocated to individual students in different courses,

- Rubrics used for each of the different types of assessment in the course to be checked
- Checking of the assessment whether it maps with learning outcomes.
- Checking of the difficulty level of question paper i.e is difficulty level on the extremes, very easy or very hard.
- Whether the assessment modes are used to cover the entire syllabus or not.
- Checking the manner of awarding the marks, i.e has correction been at the extremes, liberal or tough.

Moderation should not be restricted to just assessment but also includes the assessment design.

### 210B10.0 Semester End Examination (SEE) Marks and Passing standards

#### 210B10.1

- a. University examination for all Courses under SEE shall be conducted for a maximum of 100 Marks. The marks secured by the students for 100 marks shall be proportionately **scaled down** to a maximum of 50 marks to add the same with the CIE marks for the award of the letter grade.
- b. The University examinations for all the Programs of study shall be conducted at the end of each semester for all eight semesters.
- c. Students having no backlog course/s, may not have more than one examination on the same day. However, students having backlog



course/s may face a situation where they may have

- 1. Two examinations scheduled at the same time of the day,
- 2. To take two examinations on the same day, one during the morning session and the other in the afternoon session, and
- 3. Examinations on consecutive days.
- d. As changing the examination dates is not an option, the examination timetable shall not be modified/ altered/ adjusted in any of the above three cases. In the first case, the students shall select any one of the clashing courses and in the second and third cases, the students shall manage the examinations as per their decision.
- e. For all other theory Courses /drawing Courses of the Program, the **maximum SEE marks** shall be 50, the minimum SEE marks to be secured shall be 35 % of the maximum marks i.e., 18 marks and in total 40 % of the Course maximum marks i.e., the sum of the CIE and SEE marks prescribed for the Course.
- f. For Practical/Fieldwork/Mmi-project/ Summer Internship-I and II / the maximum SEE marks shall be 50, the minimum SEE marks to be secured shall be 35 % of the maximum marks i.e., 18 marks.
- g. For Research Internship/ Industry Internship /Major Project the maximum SEE marks shall be 100, the minimum SEE marks to be secured shall be 35% of the maximum marks i.e., 35 marks.
- h. Students who satisfy the conditions (e), (f) and (g) above, and obtain any grade from S to E in a course shall be considered to have passed that course.

#### i. A student shall be declared fail if he/she

- (a) Fails to satisfy the conditions (h) above
- (b) Absents himself/herself to the University examination.
- (c) Is held guilty of examination malpractice and for any other reasons and declared the performance of any course/s as null and void by the competent authority.
- (d)Attendance in any of the course(s) is less than the 75%
- j. If a student secures an F grade in any of the Courses, he/she shall reappear for that Course(s) during the subsequent SEE. The CIE



	marks awarded to the student at the first attempt in the concerned
	Course(s) shall be carried forward. Revised CIE marks are considered only in cases under the provision of <b>210B9.11</b>
210B10.1a	SEE Details for different Courses
210b10.1a	Theory Course with 3 Credits
	Theory SEE will be conducted by University as per the scheduled timetable,
	with common question papers for the subject (duration 03 hours)
	1. The question paper will have ten questions. Each question is set for 20
	marks.
	2. There will be 2 questions from each module. Each of the two questions
	under a module (with a maximum of 3 sub-questions), <b>should have a</b>
	mix of topics under that module.
	max or topics under that module.
	The students have to answer 5 full questions, selecting one full question
	from each module.
210B10.1b	
Z10D10.10	Theory Integrated with Practical Course (TIPC)
	SEE for the theory part (Duration 03 hours) is the same as that
	mentioned in serial no. 02 (questions mentioned in SEE paper shall
	include questions from the practical component).
210B10.1c	Theory Course with 1 Credit
210210110	Theory course with 1 Credit
	SEE paper will be set for 50 questions, each of 01 mark. The pattern of
	the question paper is MCQ. The time allotted for SEE is <b>01 hour</b>
210B10.1d	Theory Course with 2 Credits
<b>\</b>	SEE paper will be set for 100 questions each of 01 mark. The pattern
	of the question paper is MCQ. The time allotted for SEE is <b>90 minutes</b> .
	Marks scored are scaled down to 50 Marks.
	Marks scored are scaled down to 50 Marks.
	The suggested question paper pattern is MCQ for the 1st and 2nd
	semester however, <i>for higher semester/s</i> SEE may be a written
	examination pattern similar to other theory course.
210B10.1e	Engineering Graphics and Drawing
	SEE shall be conducted and evaluated for maximum marks 100. Marks
	22 2 20 Conducted and Conducted for maximum marks 100. Flatks



obtained shall be accounted for SEE final marks, reducing it by 50%

- 1. Question paper shall be set jointly by both Internal and External Examiner and made available for each batch as per schedule.
- 2. Evaluation shall be carried jointly by both the examiners.

Scheme of Evaluation: To be defined by the examiners jointly and the same shall be sent to the university along with question paper.

#### 210B10.1f

#### Field work

**SEE for fieldwork** Conducted by the Internal and External examiners appointed by University.

Report and design drawing evaluation and viva-voce are in the ratio 60:40. Fieldwork will be jointly evaluated by the Internal and External examiners. The duration of SEE is 03 hours.

#### 210B10.1g

### **Practical Course**

SEE marks for the practical course is 50 Marks.

SEE shall be conducted jointly by the internal and external examiners appointed by the University

- All laboratory experiments are to be included for practical examination.
- (Rubrics) Breakup of marks and the instructions printed on the cover page of the answer script to be strictly adhered to by the examiners. OR based on the course requirement, evaluation rubrics shall be decided jointly by internal and external examiners.
- Students can pick one question (experiment) from the questions lot prepared by the internal /external examiners jointly.
- Evaluation of write-up/ conduction procedure and result/viva will be conducted jointly by Internal and external examiners.
- General rubrics for SEE are mentioned here, procedure / writeup-20%, Conduction and result in -50%, Viva-voce 30% of maximum marks. SEE for practical shall be evaluated for 100 marks and scored marks shall be scaled down to 50 marks (however, based on course type, rubrics shall be decided by the examiners)
- Change of experiment is allowed only once and 20% Marks allotted to the procedure/ writeup part to be made zero (Evaluation is to be carried out for 80% of total maximum marks).



The duration of SEE is 03 hours.

#### 210B10.1h

#### Internship

SEE shall be conducted by the Internal and external examiners approved by the university.

The internal Guide shall be the internal examiner for the SEE.

The external Guide for Internship shall be the external examiner for SEE. Examination for internship shall be conducted at the college and the date shall be fixed in consultation with the external Guide. The Examiners shall jointly award the SEE marks.

In case the external Guide expresses his inability to conduct the Examination, the Principal /Chief Superintendent of the Institute shall appoint a senior faculty of the Department to conduct the Examination along with the internal Guide.

Rubrics for evaluation may be the same as suggested for CIE or Internal and external examiners shall devise rubrics for SEE and same may be submitted to the University along with evaluation marks.

### 210B10.1i

### Major project:

#### Maximum SEE marks for the Major Project is 100 marks

Will be conducted by the two examiners one internal and one external examiner appointed by University.

SEE marks for the project shall be awarded based on the quality of report and presentation skill, participation in the question and answer session in the ratio 50:25:25 as per the University norms by the examiners appointed VTU.

Rubrics to be followed are suggested in **Annexure-II**.

#### 210B10.2

The student will not be allowed to appear for the examination of the course in which he has already passed and cleared unless he/she opts for rejection of results of all courses of that semester.

However, students who have a CGPA of less than 5 but pass in all subjects at the end of the academic Program, subject to the provision **of maximum duration**, shall be allowed to appear for only SEE of Course/s to make up for the deficiency in CGPA and become eligible for the award of the degree.



210B10.3	A student may, at his/her desire, can reject the total performance of a semester (including CIE marks) or reject only the result of his/her performance in University examinations (SEE) of a semester. The rejection is permitted only once during the entire Program of study.
210B10.4	Students who desire to reject the SEE results of a semester shall reject the total performance (irrespective of the earned Course grades) in all the Courses of the semester either rejecting or retaining the CIE marks. However, rejection of the performance of the VIII semester project shall not be permitted.  Students who desire to reject the total SEE performance of an odd or even semester including CIE marks, have to repeat that odd or even semester of the prevailing scheme by taking readmission during the subsequent academic year/s. They shall also be governed by <b>readmission and Maximum duration clauses.</b>
	<ul><li>(i) If the rejection of SEE results excluding CIE marks is of the odd semester, students shall be allowed to take admission to the immediate next even semester.</li><li>(ii) If the rejection of SEE results excluding CIE marks is of even semester, then students shall be allowed to take admission to the next odd semester.</li></ul>
Ć	(iii) Readmission to odd/even semester shall not be considered as fresh admission and therefore students shall continue to have the same University Seat Number, which was allotted earlier. The maximum duration of the Program shall be counted with reference to the old University Seat Number.
	(iv) Applications for rejection and approval to reappear for University examinations shall be sent to the Registrar (Evaluation) through the Principal of the College within 30 days from the date of announcement of the results. Late submission of applications shall not be accepted for any reason.
	(v) Application for approval of readmission shall be sent to the Registrar through the Principal of the College within 30 days from the date of the announcement of the results. Late submission of application shall not be accepted for any reason.



	210B10.5	Studente w	ho ont for	r raiaction	of recult	c of Ilnix	orcity ov	amination	s chall ha
	210010.5	Students who opt for rejection of results of University examination shall be eligible for the award of the degree and <b>Honours / Minor Degree</b> but not							
		for the award of the degree and <b>Honours</b> / <b>Minor Degree</b> but not							
2100110	6 l'	for the award of ranks.							
210B11.0	Grading								
	210B11.1	The Univer			_	-			
		converted	_		-				
		of Semeste				-	_		rses that
		appeared						_	backlog
		course/s/a		-					
		courses th		-	-	-			
		Average (C	GPA). The	e CGPA wi	ll be calcı	ılated fo	r every se	mester, e	xcept for
		the first se	mester.				1/		
	210B11.2	The gradin	g system	with the l	etter grad	les and t	he assign	ed range	of marks
		under the a	ibsolute g	rading sys	tem shall	be as giv	en below	7:	
			Outstand		Vow		Above	<b>A</b>	<del>                                     </del>
		Level	Outstand ing	Excellent	Very Good	Good	Above	Average	Fail
		Letter Grade	S	A	В	С	D	Е	F
		Grade Points	10	9	8	7	6	4	00
		Percentage		.(.)			- 10		
		of Marks Scored in a	≥ 90	<90 ≥80	< 80 ≥70	< 70 ≥60	< 60 ≥ 45	< 45 ≥35	<35
		Course	(00.400)	(00, 00)	(50, 50)	((0, (0)	(45 50)	(10.05)	(0, 0, 0)
	0400440		(90 - 100)	(80 - 89)	(70 - 79)	(60- 69)	(45 - 59)	(40 - 35)	(0 - 34)
	210B11.3	A student							
		required to							
		secured by the student during his /her reappearance shall be awarded. The number of attempts taken to clear Course/s shall be indicated in the grade							
		card.							
210B12.0	Computation	on of SGPA and CGPA							
	210B12.1	Computation		nd CGPA					
		The following	g expressio	ns shall be	used to cor	npute the	Semester	Grade Poir	nt Average
	~	(SGPA) and C	umulative (	Grade Point	Average (0	GPA) resp	ectively:		
		210	Course(red	dits v Grad	laDoints]f	oralltha	Courses in	n that Som	actor
		$SGPA = \frac{\sum [C]}{C}$	\subsected	reoCrodite	ler omissjj lforall th	o Courses	in that S	omastar	<u> </u>
			<u> </u>	rsecreuits	])	e Courses	s in that s	entester	
				dits  imes Grad				cluding	
		CGPA =	thos	se with Fg	rades unti	il that Se	mester		
		$CGPA = \frac{those\ with\ Fgrades\ until\ that\ Semester}{\sum [CourseCredits] for\ all\ Courses\ excluding}$							
		those with Fgrades until that semester							
		The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the grade cards.							
		SGPA and CGPA calculation: An illustrative example for one academic year is shown in							
		Annexure-III							



210B12.2	Conversions of CGPA into Percentage of marks and Class Equivalence
	The formula for the conversion of CGPA into the percentage of marks after completion of program (after obtaining eligibility for the award of degree) % of marks secured, M = [CGPA Earned - 0.75] × 10
	Illustration for an earned CGPA after completion of program is 8.20: $M = [8.20 - 0.75] \times 10 = 74.5 \%$
210B12. <mark>3</mark>	Class Equivalence:
	Subsequent to the conversion of final CGPA, after successful completion of
	the Program, into the <b>percentage of marks (M)</b> , a graduating student is
	reckoned to have passed in
	(i). First Class with Distinction (FCD) if M≥ 70
	(ii). First Class (FC) if $60 \le M < 70$
	(iii). Second Class (SC) if 50 ≤ M < 60 and
	(iv). Pass Class (PC) if 42.5 ≤ M < 50

210B13.0	Vertical pro	ogression
	210B13.1	All the below clauses are subject to maximum duration of eight (Regular
		Students) / six years (Lateral Entry Students) as applicable.
		1) There shall be no restriction for promotion from an odd semester to the
		next even semester, provided the student has fulfilled the attendance
		requirement.
		2) There shall be no restriction for promotion from an even semester to the
		next odd semester, provided the student has fulfilled the attendance
		requirement
		3) <b>Obtaining CIE:</b> The student who obtains required attendance for the
	~	course, but not the required CIE marks is allowed to move forward to next
		semester. However, the student has to mandatorily obtain the required
		CIE whenever offered next. Obtaining minimum CIE marks for the course
		is mandatory. It may also be noted that the student shall not be permitted
		to appear for SEE in such courses until he / she obtains the required CIE.
		4) Carryover of backlog courses: The student who obtains required
		attendance and CIE and appears for university examinations but fails (F
		Grade) to pass a course is allowed to move forward to next semester (odd
		/even) irrespective of number of F grades. However, for the award of
		degree the student has to pass in all courses as per applicable and
		prevailing scheme and regulations. This is subject to permitted maximum
		duration. However, the student will be given admission to 7th



### semester provided he/she passes all courses of 1st and 2nd semesters.

5) Students not satisfying attendance requirement shall take readmission vide 210B5.4

### 6) Successive Failures:

- a) If a student fails to pass a Course even **after four attempts**, that course is deemed to be exempted for him/her. Then, the student shall choose a course of his / her choice with equal credit from online (NPTEL course) or the pool of courses suggested by the concerned Board of Studies either from open elective / professional elective course groups. The course so selected should not have been studied by student or to be studied in higher semester/s. The faculty advisor shall guide/advice the student in this regard.
- b) This provision is given only for one course during the entire duration of the program.
- c) This provision of course of his/her choice should reflect in the grade card of the respective semester.

#### 7) Readmission:

- a) Students who are temporarily discontinuing the program and getting readmitting/rejoining the eligible semester are subject to a maximum duration of eight (Regular) / six (lateral Entry) years as applicable.
- b) The permission for readmission is only on request through the Principal and is not treated as a matter of right. Such students will not claim any benefits based on the readmission.
- c) Students who take re-admission to any semester of the existing scheme from another scheme, as a repeater/fresher because of various reasons, shall attend and complete all the remaining semester/s of the Program adhering to the regulations of the prevailing scheme and shall complete additional Course/s, if any, as per the decision of equivalence committee in concurrence with concerned Board of Studies on establishing the equivalence between two schemes. Such a candidate shall not be eligible for the award of rank.
- d) Readmission to odd/even semester shall not be considered as fresh admission and therefore students shall continue to have the same University Seat Number, which was allotted earlier. The maximum duration of the Program shall be counted with reference to the old



	IICN (University Cost Number)						
		USN (University Seat Number)					
	210B13.2	The candidates who have temporarily discontinued the Program of study or changed the scheme of study from one to another because of various reasons or transferred with credits from the autonomous college of VTU /other University to non-autonomous constituent/affiliated college of VTU, shall be eligible for the award of degree provided the credits earned at that stage are equal to or greater than the credits decided by the University in the individual cases.					
		2) In case, the credits earned is less than the credits decided by the University in the individual cases, after the completion of all the semesters of the Program under the prevailing scheme, the candidate shall register for a Course or courses not studied earlier and make up the credits earned equal to or greater than the required for the award of degree.					
		CG	he earned Program credits are greater than PA shall be <b>proportionately</b> reduced to the dits.				
210B14.0	Award of Do	egree	-(),				
	210B14.1	B.E./B. Tec					
		(a) Stud	(a) Students shall be declared to have completed the Program of B.E. / B.				
		Tec	Tech. degree and is eligible for the award of degree provided the				
		stuc	students have undergone the stipulated Course work of all the				
			semesters under the Scheme of Teaching and Examinations and has				
		earned the prescribed number of credits in the permitted maximum					
		duration					
		(b) For the award of degree, a CGPA ≥ 5.00 at the end of the Program shall					
		be mandatory.					
	<b>-</b>		the award of degree, completion of bridg	e courses if any as			
			licable is compulsory	e courses, if any, as			
			datory Earning of Activity points:				
	•	(a) Mai	Larning of flectivity points.	Activity points			
		Sl. No.	Students Category	prescribed by AICTE			
		1	Rregular students admitted to the 4 years	100			
			Degree program				
		2	Students entering 4 years Degree	75			
			program through lateral entry				
		3	Students transferred from other	50			
			Universities to the fifth semester				
		The Activity Points earned shall be reflected on the student's eighth semester					



	Grade Card.
	(ii) Activity Points (non-credit) have no effect on SGPA/CGPA
	In case a student fails to earn the prescribed activity Points before the commencement of 8th-semester examinations, the Eighth Semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of the degree only after the release of the Eighth Semester Grade Card.
	ii) The Guidelines and suggestive activities under Activity points is listed in Annexure -VI
210B14.2	<b>B.E./B. Tech. (Honours) degree</b> (a) A student shall be declared to have completed the Program of B.E./ B. Tech., degree and shall be eligible to get undergraduate B.E./B. Tech., degree with Honours, provided.
	(a.1)The student has undergone the stipulated Course work of all the semesters under the same Scheme of Teaching and Examinations and has earned the prescribed number of credits, i.e. 160 credits for I semester admitted students and 120 for III semester lateral entry admitted student as per 210B14.1  (a.2) Has earned additional 18 or more credits through University-approved
	online Courses.  (a.3) Satisfied the Regulations Governing the Award of Honours at B.E./B.  Tech. Degree Programs – Guidelines – Annexure-IV
210B14.3	3. B.E./B. Tech. with Minor degree a) A student shall be declared to have completed the Program of B.E./ B. Tech. degree and shall be eligible to get undergraduate B.E./B. Tech., degree with minors, provided.
	<b>(a.1)</b> The student has undergone the stipulated Course work of all the semesters under the same Scheme of Teaching and Examinations and has earned the prescribed number of credits, i.e. 160 credits for I semester admitted student and 120 for III semester lateral entry admitted student
	(a.2) Has earned additional 18 or more credits through University-approved online Courses. For Guidelines refer to Annexure-V
210B14.4	Award of Degree for an Extraordinary Student: The University through college can offer a special fast-track degree for an extraordinary student. The same is done by offering courses of his / her choice to fulfill the requirement of the program in three and half years. However, the



	degree will be awarded on completion of 04 years.
	The extraordinary student is one with a CGPA $\geq 9$ in $2^{nd}$ , $3^{rd}$ and $4^{th}$ semester
210B14.5	<ul> <li>(1) Noncompliance of CGPA ≥5.00 at the end of the Program</li> <li>(A) Students who have completed all the courses of the Program but do not have a CGPA ≥5.00 at the end of the Program, shall not be eligible for the award of the degree.</li> <li>(B) In the cases of 210B14.5(A), students shall be permitted to appear again for SEE in course/s [other than Internship, Technical seminar, Project (Mini and Main), and Laboratories] of any Semester/s without the rejection of CIE marks for any number of times, subject to the provision of the maximum duration of the Program to make up the CGPA equal to or greater than 5.00 for the award of the Degree.</li> </ul>
	(C) In case the student earns improved grade/s in all the reappeared course/s, the CGPA shall be calculated considering the improved grade/s. If it is ≥5.00, the students shall become eligible for the award of the degree. If CGPA <5.00, the students shall follow the procedure laid down in 210B14.5(B).
	(D) In case the students earn improved grade/s in some course/s and the same or lesser than the previously earned pass grade/s in the other reappeared course/s, the CGPA shall be calculated considering the improved grade/s and the pass grades earned before the reappearance. If it is ≥5.00, the student shall become eligible for the award of the degree. If CGPA <5.00, the students shall follow the procedure laid down in 210B14.5(B)
	(E) In case the student earns improved grade/s in some courses and fails in the other reappeared course/s, the CGPA shall be calculated by considering the improved grade/s and the previously earned pass grade/s of the reappeared course/s in which the student has failed. If it is ≥5.00, the student shall become eligible for the award of the degree. If CGPA <5.00, the student shall fallow the procedure laid in 210B14.5(B).
	(F) In case the student fails (i.e., earns F grade) in all the reappeared course/s, pass grade/s of the course/s earned by the students before reappearance shall be retained. In such cases, the student shall follow the procedure laid in 210B14.5(B).
	<ul> <li>(G) The student shall obtain written permission from the Registrar (Evaluation) to reappear in SEE to make up the CGPA equal to or greater than 5.00.</li> <li>(2) Noncompliance of Mini-project</li> <li>The mini-project shall be considered as a head of passing and shall be</li> </ul>



		considered for the award of degree. Those, who do not take up/complete the mini-project shall be declared to fail in that course and shall have to complete the same during subsequent University examinations after satisfying the Miniproject requirements.
		(3) Noncompliance of Major-project  The Major-project shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take up/complete the Major-project shall be declared to fail in that course and shall have to complete the same during subsequent University examinations after satisfying the Major-project requirements.
		(4) Noncompliance of Internship
		All the students of B.E./B. Tech. shall have to undergo mandatory internship as per 210B 6.1. University examination shall be conducted and the prescribed credits shall be included with the credits of respective semesters. The
		internship shall be considered as a head of passing and shall be considered for
		the award of degree. Those, who do not take up/complete the internship shall
		be declared to fail in that Course and shall have to complete the same during
		subsequent University examinations after satisfying the internship
		requirements.
210B15.0	Award of P	rizes, Medals and Ranks
	210B15.1	For the award of Prizes and Medals, the conditions stipulated by the Donor
	210B15.1	For the award of Prizes and Medals, the conditions stipulated by the Donor shall be considered subject to the provisions of the statutes framed by the
		shall be considered subject to the provisions of the statutes framed by the University for such awards.
	210B15.1 210B15.2	shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/Technology, the CGPA secured by the students from III to VIII semester shall
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/Technology, the CGPA secured by the students from III to VIII semester shall be considered.
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/Technology, the CGPA secured by the students from III to VIII semester shall be considered.
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/ Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors degree shall not have any bearing for the Rank declaration.
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/ Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors degree shall not have any bearing for the Rank declaration.  (3) A student shall be eligible for a rank at the time of award of the degree
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/ Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors degree shall not have any bearing for the Rank declaration.
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors degree shall not have any bearing for the Rank declaration.  (3) A student shall be eligible for a rank at the time of award of the degree of Bachelor of Engineering/Technology, provided that the student,
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors degree shall not have any bearing for the Rank declaration.  (3) A student shall be eligible for a rank at the time of award of the degree of Bachelor of Engineering/Technology, provided that the student,  a) (i) Has passed all the Courses of I to VIII semester in the first attempt only in case of Candidates admitted to I year.  (ii) Has passed all the Courses (including bridge courses) of III to
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors degree shall not have any bearing for the Rank declaration.  (3) A student shall be eligible for a rank at the time of award of the degree of Bachelor of Engineering/Technology, provided that the student,  a) (i) Has passed all the Courses of I to VIII semester in the first attempt only in case of Candidates admitted to I year.  (ii) Has passed all the Courses (including bridge courses) of III to VIII semester in the first attempt only in case of Candidates admitted
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors degree shall not have any bearing for the Rank declaration.  (3) A student shall be eligible for a rank at the time of award of the degree of Bachelor of Engineering/Technology, provided that the student,  a) (i) Has passed all the Courses of I to VIII semester in the first attempt only in case of Candidates admitted to I year.  (ii) Has passed all the Courses (including bridge courses) of III to VIII semester in the first attempt only in case of Candidates admitted under lateral entry scheme (Diploma and B.Sc.).
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors tegree shall not have any bearing for the Rank declaration.  (3) A student shall be eligible for a rank at the time of award of the degree of Bachelor of Engineering/Technology, provided that the student, a) (i) Has passed all the Courses of I to VIII semester in the first attempt only in case of Candidates admitted to I year.  (ii) Has passed all the Courses (including bridge courses) of III to VIII semester in the first attempt only in case of Candidates admitted under lateral entry scheme (Diploma and B.Sc.). b) Is not a repeater in any semester because of rejection of result of a
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/ Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors degree shall not have any bearing for the Rank declaration.  (3) A student shall be eligible for a rank at the time of award of the degree of Bachelor of Engineering/ Technology, provided that the student, a) (i) Has passed all the Courses of I to VIII semester in the first attempt only in case of Candidates admitted to I year.  (ii) Has passed all the Courses (including bridge courses) of III to VIII semester in the first attempt only in case of Candidates admitted under lateral entry scheme (Diploma and B.Sc.). b) Is not a repeater in any semester because of rejection of result of a semester/ shortage of attendance /temporarily discontinued and
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/ Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors degree shall not have any bearing for the Rank declaration.  (3) A student shall be eligible for a rank at the time of award of the degree of Bachelor of Engineering/ Technology, provided that the student,  a) (i) Has passed all the Courses of I to VIII semester in the first attempt only in case of Candidates admitted to I year.  (ii) Has passed all the Courses (including bridge courses) of III to VIII semester in the first attempt only in case of Candidates admitted under lateral entry scheme (Diploma and B.Sc.).  b) Is not a repeater in any semester because of rejection of result of a semester/ shortage of attendance /temporarily discontinued and rejoined/readmittedetc.
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/ Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors degree shall not have any bearing for the Rank declaration.  (3) A student shall be eligible for a rank at the time of award of the degree of Bachelor of Engineering/ Technology, provided that the student,  a) (i) Has passed all the Courses of I to VIII semester in the first attempt only in case of Candidates admitted to I year.  (ii) Has passed all the Courses (including bridge courses) of III to VIII semester in the first attempt only in case of Candidates admitted under lateral entry scheme (Diploma and B.Sc.).  b) Is not a repeater in any semester because of rejection of result of a semester/ shortage of attendance /temporarily discontinued and rejoined/readmittedetc.  c) Has completed all the Courses/semesters of the same Scheme of
		shall be considered subject to the provisions of the statutes framed by the University for such awards.  1) For the award of rank in a Specialization of Bachelor of Engineering/ Technology, the CGPA secured by the students from III to VIII semester shall be considered.  (2) The additional credits earned for the award of Honours / Minors degree shall not have any bearing for the Rank declaration.  (3) A student shall be eligible for a rank at the time of award of the degree of Bachelor of Engineering/ Technology, provided that the student,  a) (i) Has passed all the Courses of I to VIII semester in the first attempt only in case of Candidates admitted to I year.  (ii) Has passed all the Courses (including bridge courses) of III to VIII semester in the first attempt only in case of Candidates admitted under lateral entry scheme (Diploma and B.Sc.).  b) Is not a repeater in any semester because of rejection of result of a semester/ shortage of attendance /temporarily discontinued and rejoined/readmittedetc.



		lateral entry) in VTU constituent college or in any VTU affiliated non-
		autonomous college.
		e) Has not been transferred from any autonomous institution affiliated to
		VTU or from any other University.
		(4) The total number of ranks awarded shall be 10% of the total number of
		students who appeared in the VIII semester subject to a maximum of 10
		ranks in a specialization.
		(5) For award of ranksin a specialization, a minimum of 10 students should
		have appeared in the VIII semester examination.
		Illustration:
		a) If 1228 students appeared for the VIII semester in Electronics and
		Communication Engineering Program, the number of ranks to be
		awarded for Electronics and Communication Engineering shall be 10.
		b) If 90 students appeared for the VIII semester in Biomedical
		Engineering, the number of ranks to be awarded for Biomedical
		Engineering will be 09.
		c) In the case of a fractional number of ranks, it is rounded to a higher
		integer only when the first decimal place is greater than or equal to 5.
	210B15.3	Ranks shall be awarded based on the merit of the students as determined by
		CGPA. If two or more students get the same CGPA, the tie shall be resolved by
		considering the number of times a student has obtained a higher SGPA. If it is
		not resolved even at this stage, the number of times a student has obtained
		higher grades like S, A, B, etc., shall be taken into account to decide the order of
		the rank.
210B16.0	COC: Trans	fer of students: The Regulations Governing the Change of College shall be
		nnexure-VII).
210B17.0	COB: The R	egulations Governing the Change of Branch shall be followed (Annexure-
	VIII)	X
210B18.0	Applicabili	y and Power to Modify
210018.0	210B18.1	The regulations governing the Degree of Bachelor of Engineering/Technology
	210010.1	of Visvesvaraya Technological University shall be binding on all concerned.
	~	of visvesvaraya recimological offiversity shall be billuling off all concerned.
	210B18.2	i) Notwithstanding anything contained in the foregoing, the University shall
		have the power to issue directions/ orders to address any difficulty.
		,
		ii) Nothing in the foregoing may be construed as limiting the power of the
		University to amend, modify or repeal any or all of the above.



#### ANNEXURE-I

**Split-up of Marks for evaluation of Practical** for 50 CIE marks and 50 SEE marks.

#### **Split-up of Marks for evaluation of Laboratory work:**

- Laboratory in-charge faculties will follow rubrics given in Tables below which is set by the Department for evaluation of laboratory programs.
- In the case of Practical, the IA marks shall be based on the laboratory observation, records, Viva, and one/two practical tests.
- Continuous Evaluation in every lab session will be done with the format mentioned in the Table to evaluate the PO9 (Individual and teamwork) and PO10 (Communication).

Rubrics used for continuous Evaluation of **laboratory courses** with **hardware experiments** 

Record			Lab Internal Ass	sessment	)	
	50M). nent is to be exith an observite-up (50 I). The record e listed/spec	vation sheet <b>narks per</b> should cified	Split-up: 40% (20 Marks) of Maximum CIE marks (50M). One/Two tests of 10 Marks each. The department may conduct 01 or 02 tests and the average of the two tests may be considered if two tests are conducted. Each test of 50 marks is averaged to 10 marks in the final CIE.  In each test, conduction of experiment and acceptable result with viva-voce will carry a weightage of 60% per experiment, with the rest 40% for procedural			
	III tire syrias.			egularity of the stud		
Rubrics per experimen t	Marks distribution	Remarks	Rubrics	Marks distribution	Remarks	
Circuit	3		Write-up	10		
Design	3	Evaluation of	Conduction	25		
Procedure	4	Record write-				
Conduction	10	up to include	D 1. 0.77			
Viva Record write-up	Record submission on time,		Results & Viva	15		
Total Marks	50	neatness, etc.	Total Marks	50		

## Split-up of Marks used for continuous Evaluation of **laboratory courses** with **software experiments**

of Morks	Methodology / Process Steps per Experiment	Marks
Marks	Observation, Write up of Procedure / Algorithm/ Program and	20
#R1	Execution of experiment	20
#R2	Viva – Voce (Questions & Answers on relevant Experiment /Topic)	10
#R3	Record writing	20
	Total Marks for each experiment	50
#R4	Internal Test (i) Write-up of Procedure/Program/Algorithm (ii) Conduction/Execution (iii) Viva-Voce	10 25 15
	Total Marks	50
	ORAFT RECUIL	

ANNEXURE-II

Split-up of marks for evaluation of Project work for 100 CIE marks and 100 SEE marks (total 10 credits).

Split up		Rubrics	Marks
		Abstract/ Synopsis Write-up	10
	Content	Selection of Topic/ Relevance of the	5
	Development	subject to concerned discipline	3
	Development	Problem Identification	5
Report		Objectives and Methodology	5
(50 Marks)		Breadth of Literature Survey	10
(50 Marks)	Problem-	(Papers/Sites/Sources Surveyed)	10
	Oriented	Documentation/ Systematic	10
	Exposition	Approach	10
	Lxposition	Results (with inference, Conclusions,	5
		etc.)	
Project		Quality of preparation of	5
Presentation		presentation	_
Skill		Communication Skills	5
(25 Marks)		Technical knowledge and awareness	5
(20 1141110)		Individual involvement	10
		Understanding of the fundamentals	10
Question	4	and concepts	
and Answer		The clarity in answering the	5
Session		questions	
(Viva- Voce)	~ ` `	The understanding ability of the	5
(25 Marks)	0	questions asked	
	25	Attitude towards the question asked	5
		Total Marks	100

AICTE Examination Reform Policy (2018) for RUBRICS to be followed for various evaluations enclosed

#### **ANNEXURE-III**

(a) SGPA	(a) SGPA and CGPA Calculations: An Illustrative Example for one academic year							
Semester (Odd :1, Even: II)	Course Code	Credits L:T:P	Grade	Grade Points (GP)	Credit Points (CrP)	SGPA, CGPA		
I	XX11	2:2:0 = 3	В	8	3x8=24			
_	XX12	2:2:0 = 3	Absent(F)	0	3x0=00	$SGPA = \frac{100}{300}$		
1	XX13	2:2:0 = 3	А	9	3x9=27	20		
1	XX14	3:0:0 = 3	F	0	3x0=00	= 5.00		
1	XX15	2:0:2 = 3	D	6	3x6=18	$\mathcal{C}_{\mathcal{C}}$		
_	XX16	0:0:2 = 1	E	4	1x4=04			
1	XX17	0:0:2 = 1	А	9	1x9=09	1		
1	XX18	1:1:1 = 2	D	6	2x6=12			
1	XX19	1:0:0 = 1	D	6	1x6 = 06			
	Total	20(14*)		Total	100			
(1/4*)· Tot	(14*). Total credits of the semester excluding the credits of the courses under F grade. Considered							

(14\*): Total credits of the semester excluding the credits of the courses under F grade. Considered for the calculation of CGPA of the two consecutive semesters under consideration.

II	XX21	2:2:0 = 3	С	7	3x7=21	
II	XX22	2:2:0 = 3	В	8	3x8=24	SCD4 - 175
П	XX23	2:2:0 = 3	D	6	3x6=18	$SGPA = \frac{175}{26}$
П	XX24	2:2:0 = 3	E	<b>/</b> 4	3x4=12	= 6.73
П	XX25	2:0:2= 3	Α//	9	3x9=27	
II	XX26	0:0:2=1	7	0	1x0=00	CGPA
II	XX27	0:0:2=1	В	8	1x8=08	(100 + 175)
II	XX28	1:1:1 = 2	Α	9	2x9=18	$-\frac{14+25}{14+25}$
II	XX29	1:0:0 = 1	В	8	1x8=08	$=\frac{274}{39}=7.05$
I semeste	er	~ X				3,7
I	XX12	2:2:0 = 3	D	6	3x6=18	
I	XX14 <b>〈</b>	3:0:0 = 3	С	7	3x7=21	
	Total	26(25*)		Total	175	

(25\*): Total credits of the semester excluding the credits of the courses under F grade. Considered for the calculation of CGPA of the two consecutive semesters under consideration.

(b) CGPA Calculation of the Programme: An Illustrative Example								
Semester	I	П	Ш	IV	٧	VI	VII	VIII
Credits of the	20	20	20	20	20	20	24	16
semester								
SGPA	5.00	6.73	9.20	6.86	8.18	7.73	9.18	9.40
∑CrP	100	175	220	165	204	185	184	169

$$CGPA = \frac{[100 + 175 + 220 + 165 + 204 + 185 + 184 + 169]}{160} = \frac{[1402]}{160} = 8.7625$$

#### Annexure - IV

#### Guidelines for Honours Degree at B.E./B.Tech. programs

#### VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI REGULATIONS GOVERNING THE AWARD OF 'HONOURS' AT B.E/B.TECH. PROGRAMS

(Approved in JBOS at Agenda Point No. 3 & E.C. vide Res. No. 2.2.1 (148th Meeting) 14-10-2019)

#### 1. Preamble:

These Regulations Governing the Award of 'Honours' At B.E/B.Tech. Degree Programs have been framed in pursuance of the provisions for this qualification in the AICTE Model Curriculum for Undergraduate Courses in Engineering & Technology, Vol. I and II, January 2018 and in the UGC Notification on Specification of Degrees, March 2014. These provisions aim at facilitating the award of higher qualifications and recognition to well-performing undergraduate and postgraduate students of the University on their acquiring additional credits in the same time period for the programs. In adopting these provisions, the University has taken steps to ensure that the quality and standard of the Degree awards are not compromised in any way and they continue to be maintained at a high level.

#### 2. Short Title, Applicability, and Commencement:

- **a)** These Regulations shall be called "VTU Regulations Governing the Award of 'Honours' at B.E/B. Tech. Programs,2019"
- b) These Regulations shall be applicable to all B. E. / B. Tech. Programs are being conducted by the University and the autonomous college under the University.
- c) These Regulations shall come into force from the date of their notification by the University.

#### 3. Definitions:

- In these Regulations, unless the context requires otherwise or it is specifically do defined:
- a) 'Academic Senate (AS)', 'Board of studies (BOS)',' Executive Council (EC)',' mean the respective Authorities of the University.
- **b)** AICTE' means the All India Council for Technical Education established in New Delhi by an Act of Parliament in 1987.
- c) 'Coursework' means the Courses prescribed for the relevant program. Which the candidate shall successfully complete in the specified time period for the Degree award.
- **d)** 'E-resources' means learning material saved electronically in *online storage platforms/devices* for use anywhere/any time accessed online or after being downloaded from the relevant sources.
- e) 'Honours' means a higher recognition award to a well-performing UG student on earning the specified extra credits after satisfying the relevant Degree award conditions.
- f) 'Intake' means the number of students sanctioned for admission in a year, to a program/Department/College as the case may be.
- g) 'MOOCS' means *massive open online courses* in a variety of disciplines available at both introductory and advanced levels accessible from e-resources in India andabroad.
- h) 'Principal' means the executive head of an affiliated/ constituent/ autonomous college under the university.
- i) Registrar and 'Registrar (Evaluation)' mean respectively the Registrar and Registrar (Evaluation) of the University.
- j) UGC' means the University Grants Commission established At New Delhi by an Act of Parliament in 1956.

k)	'University means the Visvesvaraya Technological University (VTU) with its headquarters at Belagavi
l)	'Vice Chancellor' means the Vice Chancellor of the University.
4.	Eligibility Criteria for Registration :
	Every student of the University intending to register for the Honours qualification shall fulfill the following academic requirements at only in the 5th Semester for UG, as may be applicable:
a)	He/ She shall have obtained a Grade>= D in all Courses, in the semesters until this stage.
b)	He/ She have obtained a CGPA >= 8.50 until this stage.
5	Registration Procedure:
a)	Any students meeting the eligibility criteria specified above and intending to register for the Honours qualification shall apply to the University through the Principal of his /her College in the prescribed form along with the prescribed application fee within 15 Working days after notification by the University.
b)	There shall be no limit on the intake of students for registration for the Honours qualification. All the applicants fulfilling the eligibility criteria can register.
c)	The Registrar shall notify the registration, or otherwise. of the students/s within the next 15 working days on the University Notice Boards with copies to the Colleges concerned.
d)	If registered, the students shall pay a one-time non-refundable registration fee as prescribed by the University to confirm the registration.
e)	Any student failing to maintain the performance in the 5th-8th at UG levels prescribed under clauses 4 (a) (b), as the case may be, shall discontinue the attempt to earn additional credits. The Registrar shall notify the list of deregistered students from time to time.
6.	Additional Coursework:
	In addition to the courses prescribed by the University to be completed successfully in the remaining Semesters. That is, (5-8,at UG)) for the relevant Degree award, each student registered for the Honours qualification shall have to take up the following coursework and complete the same successfully within the minimum prescribed duration for the award of degree.
a)	The relevant BOS shall announce the list of online courses chosen from NPTEL/SWAYAM, which shall be reviewed and updated periodically. The University shall have the freedom to review and approve additional online platforms from time to time.
b)	At UG level, Students shall choose online courses of 18 or more credits to be earned from the above list as defined in 6(a).
c)	In each case, the students shall be required to make use of the bouquet of online courses prepared by him/her along with the Faculty Advisor.
d)	The online courses chosen for forming a bouquet shall be from the approved online courses as defined in 6(a).

e)	Cradit aquivalance: The cradit aqu	uivalence for online courses shall be determined based on the						
e,	following table.	divalence for offinite courses shall be determined based on the						
	Table-1; Recommended credit							
	Online course duration	Recommended credits						
	4 weeks/10-15 hours	01						
	8 weeks/20-30 hours	02						
	12 weeks/30-45 hours	03						
f)	The method of assessment shall be a	s per the respective online platforms.						
g)	The student going through this o	nline coursework shall be required to submit the relevant						
	certificates issued by the relevant	online platform through the Head of Institute (HoI) to the						
	Registrar (Evaluation) on completion	n of such courses.						
7.	Λ	ard of Honours Qualification:						
/.	<u> </u>	omplete the online course as prescribed under Section 6 above						
	<u> </u>	before the closure of the UG ( $8^{th}$ Semester) as per the academic						
	calendar shall be eligible for the 'Hor	A N T						
a)		e suffixed to the respective degrees and shown in the Degree						
,	į.	achievement by the student concerned						
b)		the students shall be only on the basis of students' performance						
	in the various semester-level exam	inations conducted by the University/ Autonomous college, as						
	the case may be.							
0		Devol and Carrings						
8.	Notwithstanding anything contains	Repeal and Savings:						
a)		l in these Regulations, the provisions of any guidelines, orders, the University shall be inapplicable to the extent of their						
	inconsistency with these Regulation							
	inconsistency with these Regulation	5.						
b)	The University shall issue such orde	rs/instructions, and prescribe such format/procedure, as it may						
	deem fit to implement the provision	s of these Regulations.						
9.	Intermediation							
ļ	Interpretation:	n of those Degulations shall be desided by the Vice Chanceller						
a)	whose decision shall be final and bin	n of these Regulations shall be decided by the Vice-Chancellor,						
	whose decision shall be fillal and bir	iunig.						
b)	The University shall have the pow	rers to issue clarifications to remove any doubt, difficulty or						
	anomaly which may arise during the	implementation of the provisions of these Regulations.						

### Annexure - V

# REGULATIONS GOVERNING THE AWARD OF 'MINOR AT B.E/B.TECH DEGREE PROGRAMS

1.	Preamble:
	The concept of Major and Minors at B . E . / B.Tech. level is introduced, to enhance
	the learning skills of students, acquisition of additional knowledge in domains other
	than the discipline being pursued by the student, make the students better
	employable with additional knowledge, and encourage students to pursue cross-
	discipline research.
	A student performing well in his academics can choose courses in any other
	discipline and can get a minor degree in that. This way they are not restricted to
	learning about things only in the discipline they get admitted to, but can choose
	courses of their interest to, later on, take up a career path of their liking. The students
	taking up a minor course will get additional credits. The opportunity of acquiring
	additional credits and the minor would be available to the students of all the degrees
	and disciplines of the B.E.,/ B.Tech, program.
2.	Short Title, Applicability, and Commencement:
2a	These Regulations shall be called "VTU Regulations Governing the Award of "Minor"
	at B.E/B. Tech., Degree Programmes, 2021
2b	These Regulations shall be applicable to all B.E/ B. Tech. Programs are being
	conducted by the University and the autonomous college under the University.
2c	These Regulations shall come into force from the date of their notification by the
	University.
3.	Definitions:
	In these Regulations, unless the context requires otherwise or it is specifically do
	defined:
3a	'Academic Senate (AS), 'Board of studies (BOS)',' Executive Council (EC)',' mean the
	respective Authorities of the University.
3b	AICTE' means theAll India Council for Technical Education established in New Delhi
	by an Act of Parliament in 1987.
3c	'Coursework' means the Courses prescribed for the relevant program. Which the
	candidate shall successfully complete in the specified time period for the Degree
	award.
3d	'E-resources' means learning material saved electronically in online storage
	platforms/devices for use anywhere/any time accessed online or after being
	downloaded from the relevant sources.
3e	'Minor' means a recognition award to a well-performing UG student on earning the
	specified extra credits after satisfying the relevant Degree award conditions.

'Intake' means the number of students sanctioned for admission in a year, to a 3f program/Department/College as the case may be. 'MOOCS' means massive open online courses in a variety of disciplines available at 3g both introductory and advanced levels accessible from e-resources in India and abroad. **3h** 'Principal' means the executive head of an affiliated/ constituent/ autonomous college under the university. Registrar and 'Registrar (Evaluation)' mean respectively the Registrar and Registrar (Evaluation) of the University. **3j UGC**' means the University Grants Commission established At New Delhi by an Act of Parliament in 1956. **3k** 'University means the Visvesvaraya Technological University (VTU) with its headquarters at Belagavi 'Vice Chancellor' means the Vice Chancellor of the University. 31 **Eligibility Criteria for Registration:** 4. Every student of the University intending to register for the **Minor** qualification shall fulfill the following academic requirements only in the 5th Semester for UG as may be applicable: 4a He/ She shall have obtained a Grade>= D in all Courses, in the semesters until this stage. He/ She has obtained a CGPA  $\geq$ = 7.5 up to the 4<sup>th</sup> semester. **4b** 5 **Registration Procedure:** Any student meeting the eligibility criteria specified above and intending to register 5a for the Minor qualification shall apply to the University through the Principal of his /her College in the prescribed form along with the prescribed application fees within 15 Working days after notification by the University. 5b There shall be no limit on the intake of students for registration for the Minor qualification. All the applicants fulfilling the eligibility criteria can register. The Registrar shall notify the registration, or otherwise of the students within 5c the next 15 working days on the University Notice Boards with copies to the Colleges concerned. 5d If registered, the students shall pay a one-time non-refundable registration fee as prescribed by the University to confirm the registration. Any students failing to maintain the performance in the 5th-8th Semesters at UG, as 5e the case may be, at the levels prescribed under clauses 4 (a) and 4(b) shall not be eligible for award of minor degree. The Registrar shall notify the list of deregistered students from time to time.

6.	Additional Coursework:							
	In addition to the courses prescribed by the University to be completed successfully in the remaining Semesters. That is, (5-8, at UG) for the relevant Degree award, each student registered for the Minor qualification shall have to take up the following coursework and complete the same successfully within the minimum prescribed duration for the award of degree.							
6a	The relevant BOS shall announce the list of online courses chosen from NPTEL/SWAYAM, which shall be reviewed and updated periodically. The University shall have the freedom to review and approve additional online platforms from time to time. It is expected that all courses declared under Minors should be completed by the students through an online platform.							
	If courses are not offered by the online platform in such a situation student is permitted to complete the course(s) in self-study mode or offline mode offered by University. The relevant Board of Studies shall announce the list of the courses for Minors							
6b	At the UG level, Students shall choose online courses minimum of 18 credits to be earned from the above list as defined in 6(a).							
6с	In each case, the students shall be required to make use of the bouquet of online courses prepared by the Faculty Advisor.							
6d	The online courses chosen for forming a bouquet shall be from the approved online courses or courses prepared by the relevant BOS of the university as defined in 6(a).							
6е	Credit equivalence: The credit equivalence for online courses shall be determined based on the following table.  Table-I Recommended credit							
	Online course duration Recommended credits							
	4 weeks/10-15 hours 01							
	8 weeks/20-30 hours 02							
	12 weeks/30-45 hours 03							
6f	The method of assessment shall be as per the respective online platforms. The students going through this online coursework shall be required to submit the relevant certificates issued by the relevant online platform to the Registrar (Evaluation) on completion of such courses.							
6g	If the student chooses the courses (other than online) courses listed by BOS of							
	University, the concerned college will conduct the examinations and evaluation as per							

	the guideline issued by the University. The principal of the college has to submit the evaluation result to the Registrar (Evaluation) of VTU Belagavi.
7.	Award of Minor Qualification
	All the students who successfully complete the online course as prescribed under Section 6 above and submit their certificates in time before the closure of the UG (8 <sup>th</sup> Semester) as per the academic calendar shall be eligible for the "Minors" qualification.
7a	The "Minors' qualification shall be suffixed to the respective degrees and shown in the Degree certificate as a recognition of higher achievement by the student concerned
7b	The CGPA and/or Class awarded to the students shall be only on the basis of students' performance in the various semester-level examinations conducted by the University/ Autonomous college, as the case may be.
8.	Repeal and Savings:
8a	Notwithstanding anything contained in these Regulations, the provisions of any guidelines, orders, rules, or regulations in force at the University shall be inapplicable to the extent of their inconsistency with these Regulations.
8b	The University shall issue such orders/instructions, and prescribe such format/procedure, as it may deem fit to implement the provisions of these Regulations.
9.	Interpretation:
9a	Any question as to the interpretation of these Regulations shall be decided by the Vice-Chancellor, whose decision shall be final and binding.
9b	The University shall have the powers to issue clarifications to remove any doubt difficulty or anomaly which may arise during the implementation of the provisions of these Regulations.

#### Annexure-VI

# Guidelines for AICTE Activity Point Programme (Activity Summary Sheet)

For more details, AICTE Activity Point Programme, Model Internship Guidelines may be referred.

#### **AICTE Activity Point Programme (Activity Summary Sheet)**

The AICTE Activity Programme, a non-credit program, can be taken up any time during the semester weekends and holidays. These activities can be spread over the years, as per the convenience of the student. However, the minimum hours specified must be satisfied.

Following suggestive activities may be carried out by students in teams as per their choice.

	onowing suggestive activities may be carried of	Minir	num	Performance	Evaluated by
Sl. No.	Activity Head	Dura Weeks	tion Hours	appraisal/ Maximum points/	
NO.		WCCKS	Hours	activity	
1	Helping local schools to achieve good result and enhance their enrolment in Higher/technical/Vocational Education.	2	80 - 90	<b>S</b> 20	
2	Preparing an actionable business proposal for enhancing the village Income.	2	80 - 90	20	
3	Developing a Sustainable Water Management system	2	80 - 90	20	NSS/ youth Red
4	Tourism Promotion Innovative Approaches.	2	80 - 90	20	Cross
5	Promotion of Appropriate Technologies.	2	80 - 90	20	Co-ordinators
6	Reduction in Energy Consumption.	2	80 - 90	20	/Chairperson
7	To Skill rural population.	2	80 - 90	20	-CICC
8	Facilitating 100% Digitized money transactions.	2	80 - 90	20	(College Internal
9	Setting of the information imparting club for women leading to contribution in social and economic issues.	2	80 - 90	20	Complaints Committee) / SAGY (Sansad
10	Developing and managing efficient garbage disposable system.	2	80 - 90	20	Adarsh Gram Yojana, Govt.
11	To assist the marketing of rural produce.	2	80 - 90	20	of India) of
12	Food preservation/packaging.	2	80 - 90	20	the institute/
13	Automation of local activities.	2	80 - 90	20	Mentor
14	Spreading public awareness under rural outreach programmes	2	80 - 90	20	
15	Contribution to any national level initiative of Government of India. For e.g. Digital India/ Skill India/ Swachh Bharat Internship etc.,	2	80 - 90	20	