### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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### REGULATIONS GOVERNING

THE DEGREE OF BACHELOR OF ENGINEERING/ TECHNOLOGY (BE/B.Tech)
UNDER OUTCOME BASED EDUCATION (OBE)

AND

CHOICE BASED CREDIT SYSTEM (CBCS)

Effective from the academic year 2018 - 19

2018

PRINCIPAL
Alvare Institute of Engg. & Technology,
17(a). MOUDEIDEL - 574-225, D.K

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#### **Definitions of Keywords**

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

- 1) **Programme:** Is an educational programme in a particular stream/ branch of Engineering/branch of specialization leading to award of the Degree. It involves events/activities, comprising of lectures/ tutorials/ laboratory work/ field work, outreach activities/ project work/ vocational training/ viva voce/ seminars/ internship/ assignments/ presentations/ self-study etc., or a combination of some of these.
- **Branch:** Means Specialization or discipline of BE/B.Tech Degree Programme, like Civil Engineering, Mechanical Engineering, Textile Engineering, etc.
- 3) Semester: Refers to one of the two sessions of an academic year (vide: serial number 4), each session being of sixteen weeks duration (with working days greater than or equal to ninety). The odd and even semesters shall be as per the University academic calendar.
- **Academic Year:** Refers to the sessions of two consecutive semesters (odd followed by an even) including periods of vacation.
- 5) Course:Referstousually referred to as 'papers' and is a component of a programme. All Courses need not carry the same weight. The Courses should define learning objectives and learning outcomes. A Course may be designed to comprise lectures/ tutorials/ laboratory work/ field work/ 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: Refersto a unit by which the Course work is measured. It determines the number ofhours of instructions required per week. One credit is equivalent to one hour of lecture or two hours of laboratory/practical Courses/ tutorials/ fieldwork per weeketc.
- 7) Audit Courses: Meansthe Knowledge/ Skill enhancing Courses without the benefit of a grade or credit for a Course.
- 8) Choice Based Credit System (CBCS): Refers to customizing the Course work, through Core, Elective and soft skill Courses, to provide necessary support for the students to achieve their goals.
- 9) Course Registration: Refers to formal registration for the Courses of a semester (Credits) by every student under the supervision of a Faculty Advisor (also called Mentor, Counselor etc.,) in each semester for the Institution to maintain proper record.
- **10) Course Evaluation:** MeansContinuous Internal Evaluation (CIE)and Semester End Examinations (SEE) to constitute the major evaluations prescribed for each Course.CIE and SEE to carry 40% and 60% respectively, to enable each Course to be evaluated for 100 marks, irrespective of its Credits.
- 11) Continuous Internal Evaluation (CIE): Refers to evaluation of students' achievement in the learning process. CIE shall be by the Course Instructor and includes 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.
- **Semester End Examinations(SEE):** Refers to the examinationsconducted by the University covering the entire Course Syllabus. For this purpose, Syllabi to be modularized and SEE questions to be set from each module, with a choice confined to the concerned module only. SEE is also termed as University examination.
- 13) First Attempt:Refers to a student who has completed all formalities and has become eligible to attend the SEE and has attended at least one head of passing, such attempt shall beconsidered as first attempt.
- 14) Credit Based System (CBS):Refers to quantification of Course work, after a student completes teaching learning process, followed by passing in both CIE and SEE. Under CBS, the requirement for awarding degree is prescribed in terms of total number of credits to be earned by the students.

**15) Credit Representation:** Refers to the Credit Values for different academic activities considered, as per the Table.1. Credits for seminar, project phases, project viva—voce and internship shall be as specified in the Scheme of Teaching and Examination.

<b>16</b> )	L	Table 1: Credit Values									
	e	Theory/Lectures (L)	Tutorials (T)	Laboratory/Practical (P)	Credits	Total					
	t	(hours/week/Semester)	(hours/week/Semester)	(hours/week/Semester)	(L:T:P)	Credits					
	t	4	0	0	4:0:0	4					
	e	3	0	0	3:0:0	3					
	r	2	2	0	2:1:0	3					
	~	2	0	2	2:0:1	3					
	G	2	2	2	2:1:1	4					
	r	0	0	6	0:0:3	3					
	a d	<b>NOTE:</b> Activities like, carry Credits.	practical training, study	y tour and participation in C	Guest lectur	es not to					

- : 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.
- 17) Grading: Grade refers to qualitative measure of achievement of a student in each Course, based on the percentage of marks secured in CIE and SEE. Grading is done by Absolute Grading [Refer: 18OB6.0]. The rubric attached to letter grades are as follows:
  S Outstanding, A Excellent, B Very Good, C Good, D Above Average, E Average and F Fail.
- **18**) **Grade Point (GP):** Refers to a numerical weightage allotted to each letter grade on a 10-point scale as under.

Letter Grade and corresponding Grade Points on a typical 10 – Point scale								
Letter Grade	S	A	В	C	D	Е	F	
Grade Point	10	09	08	07	06	04	00	

- **Passing Standards:** Refers to passing a Course only when getting GP greater than or equal to 04 (as per serial number 18).
- **20**) **Credit Point:** Is the product of grade point (GP) and number of credits for a Course i.e., Credt points (CrP) =  $GP \times Credits$  for the Course.
- **Semester Grade Point Average (SGPA):**Refers to the measure of academic performance of student/s in a semester. [Refer:18 OB6.2]
- **22**) **Cumulative Grade Point Average (CGPA):**Is a measure of overall cumulative performance of a student over all semesters. [Refer:18 OB6.2]
- **23**) **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 Programme details (Course code, title, number of credits, grades secured) along with SGPA of that semester and CGPA earned till that semester.
- 24) University: Visvesvaraya Technological University (VTU), Belagavi.



18OB1.0	Title, Duration and Credits of the Programme of Study
18OB1.1	The Programme of study shall be called the degree of Bachelor of Engineering /Bachelor
	of Technology, abbreviated as BE / B.Tech. ■
18OB1.2	(a) The Programme to which students are admitted to First semester of BE /
	B.TechProgramme shall be of four academic years duration divided into eight semesters.
	The actual Teaching and Learning days shall be for at least 90 working days in a
	semester.
	(b) The Programme to which students are admitted to III semester of BE /
	B.TechProgramme under lateral entry shall be of three academic years duration divided into six semesters. The actual Teaching and Learning days shall be for at least 90
	into six semesters. The actual Teaching and Learning days shall be for at least 90 working days in a semester.
	(c) The Programme (conducted during evening) to which students are admitted to III
	semester of BE / B.TechProgramme under lateral entry shall be of three academic years
	duration divided into six semesters. The actual Teaching and Learning days shall be for
	at least 90 working days in a semester. The deficit contact hours of the Programme,
	conducted during evening on all working days, shall be compensated on all Sundays
	(except on general holidays). ■
18OB1.3	The calendar of events in respect of the programme of study shall be notified by the
	University in advance. ■
18OB1.4	Maximum Duration for Programme Completion:
	(a)(i) Students admitted to First year BE/B.Tech shall complete the Programme within
	a period of <b>eight academic years</b> from the date of first admission, failing which
	they have to discontinue the Programme.
	(ii) Students admitted II Year BE/B.Tech under lateral entry scheme shall complete the Programme within a period of six academic years from the date of first
	admission, failing which he/she has to discontinue the Programme.
	(b)(i) A student who has not obtained the eligibility to III semester even after three
	academic years from the date of admission to I semester shall discontinue the
	<b>Programme or get readmitted</b> to I semester of first year BE/B.Tech with a new
	University Seat Number but retaining the same year of admission.
	(ii) If a student does not get eligibility to III semester even after <b>two academic years</b>
	from the date of readmission to I semester [as per 18OB1.4 (b) (i)], he/she shall
	discontinue the Programme or seek fresh admission to I semester of first year
	BE/B.Tech as the leeway (scope) of satisfying 18OB1.4 (a) (i) is not possible.
	(c)(i)A student (under lateral entry scheme) who has not obtained the eligibility for V semester even after <b>two academic years</b> from the date of admission to III
	semester shall <b>discontinue the Programmeor get readmitted</b> to III semester of
	II year BE/B.Tech with a new University Seat Number but retaining the same
	year of admission.
	(ii) If a student (under lateral entry scheme) does not get eligibility to V semester
	even after <b>two academic year</b> from the date of readmission to III semester [as
	per 18OB1.4 (c) (i)] shall discontinue the Programme or seek fresh
	admission
10OD1 5	to III semester BE/B. Tech as the leeway of satisfying 18OB1.4 (a) (ii) is not
18OB1.5	Prescribed Number of Credits for the Programme [to be read along with 18OB8.14 and 18OB11.2]
	(a) The number of credits to be completed by students admitted to I semester of
	BE/B.Tech Programme shall be 175.
	(b) The number of credits to be completed by students admitted to III semester of
	BE/B.Tech Programme under lateral entry scheme shall be 135.

18OB1.6	Definition of Credits:								
	1 hour Lecture (L) per week per semester =1 Credit								
	2 hour Tutorial (T) per week per semester =1 Credit 2 hour Practical/Laboratory/Drawing (P) per week per semester =1 Credit.  ■								
10074									
18OB2.0	EligibilityforAdmissionto BE/B.Tech Programmes(As per the Government orders								
18OB2.1	issued from time to time) (a)Day Engineering College ( Eligibility: Candidates who have Passed in Second								
100221	PUC/ Twelfth standard)  (i) Passed in Second PUC/12 <sup>th</sup> standard/Equivalent examination with English as one of the Languages and obtained a minimum of 45 % of Marks in aggregate in Physics and Mathematics along with Chemistry/Bio-Technology/Biology/Electronics/Computer.  40 % for SC, ST, Category – 1, 2A, 2B, 3A and 3B category candidates.								
	(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 eligibility certificate for seeking admission to BE/B.Tech Degree Programme from Visvesvaraya Technological University, Belagavi.								
	(b) Day Engineering College (Eligibility: Candidates who have Passed 3 year Diploma)								
	(i) A candidate who has passed any diploma examination or equivalent examination and obtained an aggregate minimum of 45 % marks taken together in all the subjects of the final year (Fifth and Sixth semester) diploma examination (qualified examination) is eligible for admission to BE/B.TechProgrammes, and 40 % of marks in qualified examination in case of SC, ST and Backward Classes of Karnataka candidates.  (ii) Those candidates who have completed Diploma from other than Karnataka state shall provide the Equivalence/ Eligibility Certificate issued from the Director of Technical Education, Karnataka.								
	(c) Evening Engineering College (Eligibility: Candidates who have Passed 3 year Diploma):								
	(i) A candidate who has passed any diploma examination or equivalent examination and obtained an aggregate minimum of 45 % marks taken together in all the subjects of the final year (Fifth and Sixth semesters) diploma examination (qualified examination) is eligible for admission to BE/B.TechProgrammes, and 40 % of marks in qualified examination in case SC, ST and Backward Classes of Karnataka candidates. In addition to this a candidate after passing the diploma, must have minimum of Two years full-time work experience as on 1 <sup>st</sup> September of the year of admission, in a registered firm/Company/Industry/Educational and/Government Autonomous Organizations in the branch of Engineering/Technology, in which the candidates holds 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								
	<ul> <li>Private company registered under the Directorate of Industries and Commerce or the Directorate of Small Scale Industries or</li> <li>Government, Government recognized Institutions as technical staff.</li> </ul>								

18OB2.1 (continued)	Provided that the 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 case where genuinenessof the employment certificate is questionable, such candidates have to produce supportive documents specifying the registration details of the Industry/Company (e.g., SSI Registration) and or identity cards provided to them together with latest salary certificate and provident fund certificate. However, the employer has to fill up the NOC duly signed by the company authority.  (d) Day Engineering College (Eligibility: Candidates who have Passed B.Sc Degree)  Passed B.Sc. Degree from a recognized University as defined by UGC, with at least 45% marks (40% in case of candidates belonging to reserved category) and passed 10+2 examination with Mathematics as a subject. ■							
18 OB 2.2	With regard to the qualification earned from foreign countries, Equivalence certificate from the University/ Association of Indian Universities is mandatory for admission to BE/B.Tech Programmes. In case of any dispute about the equivalence in qualification earned from foreign countries, the decision of the University Equivalence Committee shall be the final in establishing the eligibility of the student.							
18 OB 3.0	Courses							
18 OB 3.1	<ul> <li>There shall be the following types of Courses: <ul> <li>a) Humanities, Social Sciences and Management (HSMC): These are mandatory for all disciplines.</li> <li>b) Basic Sciences (BSC): Physics, Chemistry and Mathematics. These are mandatory for all disciplines.</li> <li>c) Engineering Sciences (ESC): Materials, Workshop, Drawing, and Basics of Electrical/ Electronics/ Instrumentation/ Civil/ Mechanical/ Computer Engineering etc. These are mandatory for all disciplines.</li> <li>d) Professional 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 are mandatory to complete them to fulfill the requirements of a Programme.</li> <li>e) Professional ElectiveCourses (PEC): Are the professional Electives, relevant to the chosen specialization / branch and can be chosen from the pool of papers. It shall be supportive to the discipline providing extended scope/enabling an exposure to some other discipline /domain and nurturing student proficiency skills.</li> <li>f) Open Elective Courses (OEC): Are the Elective Courses from other technical areas and/ or from emerging fields.</li> <li>g) Project Work (PROJ): Mini project and Main Project. Carried out at the Institution or elsewhere without interfering with the regular classwork.</li> <li>h) Seminar: Deliverable at the Institution under the supervision of a Faculty.</li> <li>i) Internship: Preferably at an industry/R and D organization/Tr company/ Government organization or elsewhere of significant repute for a specified period as mentioned in Scheme of Teaching and Examination.</li> <li>j) Mandatory Courses (MC): These Courses are mandatory, without the benefit of a grade or credit, for students admitted to BE/B.Tech programme. A pass in each mandatory Course is required to qualify for award the award of degree.</li> </ul> </li> </ul>							

18 OB 3.2	The minimum number of students registered to any Elective Courseoffered by the Departments shall be not less than ten.  However, the above condition shall not be applicable to programmes having a class strength less than 10. ■
18 OB 3.3	A student shall exercise his option in respect of Elective Course/s and register for the same at the beginning of the concerned semester.  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 calendar of the University.
18 OB 3.4	Course Registration:  Every student shall register for the Courses of a semester (Credits) under the supervision of a Faculty Advisor (also called Mentor, Counselor etc.,) in each semester for the Institution to maintain proper record. ■
18OB4.0	Internship/Professional Practice
18 OB 4.1	Internship / Professional Practice The Internship shall be completed during the period specified in the Scheme of Teaching and Examination.  1) The internship shall preferably be at an industry/R and D organization/IT company/ Government organization of significant repute for a specified period as mentioned in Scheme of Teaching and Examination.  2) The Department/college shall nominate staff member/s to facilitate, Guide and supervise students under internship.  3) 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.  4) After the completion of Internship, students shall submit a report with completion certificate and attendance certificate to the Head of the Department with the approval of both internal and external Guides.  5) There shall be 40 marks for CIE and 60 marks for SEE. The minimum requirement of CIE marks shall be 50% of the maximum marks.  6) The internal Guide shall be the internal examiner for the SEE. [To be read along with 18 OB 8.2 (d)]  7) The external Guide for Internship shall be an examiner for SEE. Examination in 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. [To be read along with 18 OB 8.9 (f)]  8) In case the external Guide expresses his inability to conduct Examination, the Chief Superintendent of the institution shall appoint a senior faculty of the Department to conduct the Examination along with the internal Guide. The same shall be informed in writing to the concerned Chairperson, Board of Examiners (BOE).  9) The students are permitted to carry out the internship anywhere in India or abroad. The University will not provide any kind of financial assistance to any student for carrying out the Internship. ■
18 OB 5.0	Technical Seminar and Project
18 OB 5.1	Technical Seminar: Technical Seminaris one of the head of passing.  (i) Each candidate shall deliver Technical seminar as per the Scheme of Teaching and Examination on the topic chosen from the relevant fields.

18OB5.1 (continued)	(ii) The Head of the Department shall make an arrangement for conducting 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 twosenior faculty members of the Department and the senior most acting as the Chairperson. [To be read along with 18 OB 8.2 (e)]. ■									
18OB5.2	<b>Project:</b> Project (Mini and Main) is one of the head of passing.  Mini Project Work and Main ProjectWork shall preferably be batch wise, the strength of each batch shall not exceed a maximum of four students.  ■									
18OB5.3	Ex	amination in Mi	ni Project W	ork and M	Iain Project	t Work shal	l be condi	ucted batch	ı-wise.∎	
18OB 6.0	Co	omputation of S	GPA and C	GPA						
18OB 6.1		The University and every sen and Cumulati semester, exce The grading sy grading system	nester results we Grade Po ept for the fir ystem with t	s shall be oint Avera est semeste he letter g	declared wage (CGPA) er.	vith Semest .). The CG	er Grade PA will l	Point Ave be calculat	rage (SGP) ed for eve	
		Level	Outstanding	Excellent	Very Good	Good	Above Average	Average	Fail	
		Letter Grade	S	A	В	С	D	Е	F	
		Grade Points  Percentage of Marks Scored	10 ≥ 90	9 <90 ≥80	8 < 80 ≥70	7 <70 ≥60	6 < 60 ≥ 45	4 < 45 ≥40	< 40	
		(40 - 44)	(0 - 39)							
18 OB 6.2	(iii) A student obtaining Grade F in a Course shall be considered failand is required to reappear in the subsequent SEE. Whatever the letter grade secured by the student during hit /her reappearance shall be awarded. The number of attempts taken to clear Course/s shall be indicated in the grade card. ■  Computation of SGPA and CGPA The following expressions shall be used to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) respectively:									
	$SGPA = \frac{\sum[Course\ Credits\ \times\ Grade\ Points]\ for\ all\ the\ Courses\ in\ that\ Semester}{\sum[Course\ Credits\ ]\ for\ all\ the\ Courses\ in\ that\ Semester}$								ıester_	
	$\sum [Course\ Credits\ ]\ for\ all\ the\ Courses\ in\ that\ Semester$ $\sum [Course\ Credits\ \times\ Grade\ Points\ ]\ for\ all\ Courses\ excluding$ $CGPA = \frac{those\ with\ F\ grades\ until\ that\ Semester}{\sum [Course\ Credits\ ]\ for\ all\ Courses\ excluding}$ $those\ with\ F\ grades\ until\ that\ semester}$									

18	OB	<b>6.2</b>
(co	ntin	ued)

(	(a) SGPA and CGPA Calculations: An Illustrative Example for one academic year									
Semester (Odd:I,E ven:II)	Course Number	Credits	Grade	Grade Points	Credit Points	SGPA, CGPA				
I	XX101	5:0:0 = 5	В	8	5 × 8					
I	XX102	3:2:0 = 5	Absent(F)	0	$5 \times 0 = 00$					
I	XX103	3:0:0 = 3	Α	9	$3 \times 9 = 27$	117				
I	XX104	0:1:1=2	F	0	$2 \times 0 = 00$	$SGPA = \frac{1}{25} = 4.68$				
I	XX105	4:1:0 = 5	D	6	$5 \times 6 = 30$	$SGPA = \frac{117}{25} = 4.68$				
I	XX106	5:0:0 = 5	E	4	$5 \times 4 = 20$					
	Total	25 (18*)	Total		$11\overline{7}$					

(18\*): 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	XX107	3:1:1 = 5	С	7	$5 \times 7 = 35$	
II	XX108	4:0:0 = 4	В	8	$4 \times 8 = 32$	157
II	XX109	3:0:0=3	D	6	$3 \times 6 = 18$	$SGPA = \frac{137}{25} = 6.28$
II	XX110	4:1:0 = 5	E	4	$5 \times 4 = 20$	25
II	XX111	2:1:1 = 4	A	9	$4 \times 9 = 36$	CGPA
II	XX112	2:0:0=2	F	0	$2 \times 0 = 00$	(117 + 157)
II	XX113	0:2:0=2	В	8	$2 \times 8 = 16$	$=\frac{18+23}{18+23}$
	Total	25 (23*)	T	otal	157	= 274/41 = 6.68
		, , ,				-2/4/41 - 0.00

(23\*): 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.

If the Student secures letter grades as detailed below after reappearance to SEE, then the SGPA and CGPA shall be calculated as indicated below.

I	XX102	3:2:0 = 5	D	6	$5 \times 6 = 30$	SGPA (I Semester)
I	XX104	0:1:1 = 2	С	7	$2 \times 7 = 14$	= (117 + 30 + 14)  /25
II	XX112	2:0:0 = 2	D	6	2 × 6 = 12	SGPA (II Semester) = (157 + 12)/25 = 169/25 = <b>6.76</b>

CGPA at the end of the academic year after passing all the Courses of the two consecutive semesters under consideration =  $\frac{(6.44 \times 25 + 6.76 \times 25)}{50}$ 

**= 6.60** ■

(b) CGPA Calculation of the Programme:An Illustrative Example								
Semester	I	II	III	IV	V	VI	VII	VIII
Credits of the semester	20	20	24	24	25	24	20	18
SGPA	7.00	8.50	9.20	6.86	8.18	7.73	8.68	9.40

CGPA

17

**= 8.16** ■

18 OB 6.3

**Grade Card:** Based on the secured letter grades, grade points, SGPA and CGPA, a grade card for each semester and a consolidated grade card indicating the performance in all semesters shall be issued. ■

18OB 7.0	Conversions of CGPA into Percentage of marks and Class Equivalence
18OB 7.1	Conversion Formula for the conversion of CGPA into percentage is given below.
	Percentage of marks secured, $P = [CGPA Earned - 0.75] \times 10$
	Illustration for aCGPA of 8.20:
	$P = [CGPA Earned 8.20 - 0.75] \times 10 = 74.5 \%$
18OB 7.2	Class Equivalence:
	Subsequent to the conversion of final CGPA, after successful completion of the Programme, into percentage of marks (P), a graduating student is reckoned to have passed in
	(i) First Class with Distinction (FCD) if $P \ge 70\%$
	(ii) First Class (FC) if $P \ge 60\%$ but <70% and
	(iii) Second Class (SC) if $P < 60\%$ .
18OB8.0	Continuous Internal Evaluation, Semester End Evaluation and minimum standards
	Continuous Internal Evaluation Marks:
18OB8.1	(a)Except for Vyavaharika Kannada (Kannada for communication)/Aadalitha Kannada
	(Kannada for Administration), Technical seminar and Project work phase -1, the CIE marks for
	all credit Courses, shall be 40.
	(b) Minimum CIE marks for all theory Courses shall be 40 % of the marks prescribed for
	Continuous Internal Evaluation i.e., 16 marks.
	(c)Minimum CIE marks for Practical/ Mini-project / Internship/Technical Seminar/Project work
	– Phase 2 shall be 50 % of the maximum marks i.e., 20 marks.
	(d) The CIE marks for Vyavaharika Kannada (Kannada for communication)/Aadalitha Kannada
	(Kannada for Administration), Technical seminar and Project work phase -1 shall be 100.
	(e) Minimum CIE marks for Vyavaharika Kannada (Kannada for communication)/Aadalitha Kannada (Kannada for Administration)shall be 40 % of the marks prescribed for Continuous
	Internal Evaluation i.e., 40 marks.
	(f) Minimum CIE marks for Project work – Phase 1 and Technical seminar shall be 50 % of the
	maximum marks i.e., 50 marks.
	(g) Minimum CIE marks for Additional Mathematics I and II, and the courses (Engineering
	Graphics and Elements of Civil Engineering and Mechanics of the First Year Engineering)
	to be completed by BS.c graduates under lateral entry shall be 40 % of the marks prescribed for
10.07.04	Continuous Internal Evaluation i.e., 16 marks. ■
18 OB 8.2	Continuous Internal Evaluation Procedure: [To be read along with 18 OB 8.1 and 8.3]
	(a) Theory Courses: (i) CIE Marks in each theory Course [including "Technical English I and II", "Constitution of
	India, Professional Ethics and Human Rights", "Environmental Studies", "Additional
	Mathematics I and II", and the courses (Engineering Graphics and Elements of Civil
	Engineering and Mechanics of the First Year Engineering) to be completed by B.Sc graduates
	under lateral entry] shall be the sum of marks prescribed for tests and assignments. Marks
	prescribed for tests shall be 30 and that for assignments 10.
	(ii) The CIE marks awarded for tests in the theory Course/sshall be based on three tests generally
	conducted at the end of fifth, tenth and fifteenth week of each semester. Each test shall be
	conducted for a maximum of 50 marks and the final test marks shall be the average of three
	tests, proportionately reduced to a maximum of 30 marks.
	(iii) The remaining 10 marks shall be awarded based on the evaluation of assignments/unit
	tests/written quizzes that support to cover both lower and higher order thinking skills as per Bloom's Revised Taxonomy and Course/programme outcomes.
	(iv) Final marks awarded shall be the sum of 180B 8.2 (a) (ii) and (iii) for a maximum of 40
	marks.

#### Visvesvaraya Technological University, Belagavi Regulations Governing the Degree of Bachelor of Engineering/ Technology (B.E/B.Tech)

Under Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

### 18 OB 8.2 (continued)

(v)The candidates shall write the 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 at the direction of the Registrar (Evaluation).

#### (b) Drawing/Field work Courses:

- (i) The CIE marks awarded for I year Engineering Graphics Course shall be based on
  - (a) Class work for 24 marks (sketching and Computer Aided Engineering Drawing).
- (b)Two Tests conducted in the same pattern as that of SEE for 16 marks (The marks secured Can be taken as best of the two tests).
- (ii) 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 60:40.
- (iii) The CIE marks awarded for field work (like Surveying Practice) shall be based on the evaluation of the associated field work and one test in the ratio 60:40.

#### (c) Practical Courses

The CIE marks awarded in case of Practical, shall be based on the weekly evaluation of laboratory journals/ reports after the conduction of every experiment and one practical test in the ratio 60:40.

#### (d) Internship

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

#### (e) Technical Seminar

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

#### (f) Mini - Project

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

#### (g) Main Project Work

#### (i) Project Work Phase – 1

The CIE marks awarded for project work phase -1, shall be based on the evaluation of project work phase -1 Report, Project Presentation skill and Question and Answer session in the ratio 50:25:25. The marks awarded for the Project report shall be the same for all the batch mates.

#### (ii) Project Work Phase - 2

The CIE marks awarded for project work phase -2, shall be based on the evaluation of project work phase -2 Report, Project Presentation skill and Question and Answer session in the ratio 50:25:25. The marks awarded for Project report shall be the same for all the batch mates.

### (h) Vyavaharika Kannada (Kannada for communication)/Aadalitha Kannada (Kannada for Administration)

- (i) CIE Marks in Vyavaharika Kannada (Kannada for communication)/Aadalitha Kannada (Kannada for Administration) shall be the sum of marks prescribed for tests and assignments. Marks prescribed for tests shall be 75 and that for assignments be 25.
- (ii) The CIE marks awarded for the tests shall be based on three tests generally conducted at the end of fifth, tenth and fifteenth week of each semester. Each test shall be conducted for a maximum of 25 marks and the final CIE marks shall be the sum of the marks of all the three tests.
- (iii) The remaining 25 marks shall be awarded based on the evaluation of assignments/unit tests/written quizzes that support to cover both lower and higher order thinking skills as per Bloom's Revised Taxonomy and Course/programme outcomes.
- (iv) Final marks awarded shall be the sum of 18OB 8.2 (h) (ii) and (iii) for a maximum of 100 marks.
- (v)The candidates shall write the tests assignments/unit-tests /written quizzes in Rlue Rooks

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18 OB 8.2 (continued)	after the announcement of University results and shall be made available for verification at the direction of the Registrar (Evaluation). ■
18 OB 8.3	<ul> <li>(a)The CIE marks in the case of Internship/Technical Seminar/Mini-Project and Project Work Phase 1 and 2 shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.</li> <li>(b) A committee constituted by the Head of the Department of Humanities and Social Science shall award the CIE marks for the Course Vyavaharika Kannada (Kannada forcommunication)/ Aadalitha Kannada (Kannada for Administration). The committee shall consist of two senion faculty members of the Department and the senior most acting as the Chairperson. ■</li> </ul>
18 OB 8.4	<ul> <li>(i) Students failing to secure the minimum percentage of CIE marks of any Course/sshall 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 in other Courses of the same semester and backlog Course/s if any.</li> <li>(ii) Improvement in CIE marks shall not be allowed during the current semester.</li> <li>(iii) Students who have satisfied the attendance requirement but not the CIE requirements are permitted to register afresh and appear for SEE after satisfying the CIE requirementsin the same Course/s (with or without satisfying the attendance requirement)when offered during subsequent semester/s.</li> <li>(iv) The Course/s when repeated are considered as attempts. ■</li> </ul>
18OB8.5	CIE marks of those students, who come under 18OB8.4, shall be sent separately to the Registran (Evaluation). ■
18 OB 8.6	The final list, incorporating corrections (if any) of CIE marks awarded to the students in the Theory/Practical/Internship/ Technical Seminar / Mini – Project/Project work –phase 1 and 2 shall be displayed on the notice board of the college much before the closure of the semester. The 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 shall bear the signatures of the concerned Teacher/Teachers, Head of the Department and Principal.
18 OB 8.7	Any corrections or overwriting of CIE marks 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 and attest it with his/her signature.
18 OB 8.8	CIE marks shall reach the University before the commencement of examination as per the notification from the office of the Registrar (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.
18 OB 8.9	Semester End Examination and Passing standards  (a) For all credit Coursesincluding "Additional Mathematics I and II", and the courses (Engineering Graphics and Elements of Civil Engineering and Mechanics of the First Year Engineering) to be completed by BS.c graduates under lateral entry)the SEE marks shall be 60.  (b) University examination for all Courses under SEE are conducted for a maximum of 100 Marks.  (c) The University examination in all programmes of study shall be conducted at the end of each semester for all the eight semesters. The examinations shall not be considered as overlapping if at all a student appears for examinations conducted in the morning and afternoon session. Further, the examinations shall not also be considered as overlapping if the same student appears for the next days examinations.  (d) The pattern of the SEE question paper for Courses Technical English I and II, Constitution of India, Professional Ethics and Human Rights, and Environmental Studies shall be objective

18 OB 8.9	(e) For a pass in a theory Course/Drawing, students shall secure a minimum 35 % of the
(continued)	maximum marks prescribed for the University examination and in total 40 % of the maximum
(continued)	marks prescribed for the Course including the CIE marks secured by the students (i.e., SEE +
	CIE).
	(f) For a pass in Practical/ Mini-project / Internship/Technical Seminar/Project work, students
	shall secure a minimum of 40 % of the maximum marks prescribed in the University
	examination.
	(g) Students who satisfy the conditions 18OB 8.9 (e) and (f), and obtain any grade from S to
	E shall be considered as passed.
	(h) A student shall be declared fail if the candidate
	(h.a) Fails to satisfy the conditions 18OB 8.9 (g).
	(h.b) Absents himself / herself to the University examination.
	(h.c) Is held guilty of examination malpractice and for any other reasons, and declared the
	performance of any Course/s null and void by a competent authority.
	(i) If a student secures F grade in any of the Course/s, he/she shall reappear in that Course/s
	during the subsequent SEE. The CIE marks awarded to the student at first attempt in the
18 OB 8.10	Students who pass a Course of a semester as per 18OB 8.9 (g) shall not be allowed to appear for
	any individual Course again, unless they opt for rejection of results of entire semester. However,
	students who have CGPA less than 5.00 at the end of an academic year shall be allowed to
10 OD 0 11	appear for Course/s to make up the deficiency in CGPA. ■
18 OB 8.11	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 examination of a semester.
10 OD 0 13	The rejection is permitted only once during the entire Programme of study.
18 OB 8.12	(a) The student who desires to reject the results of a semester shall reject performance in all the Courses of the semester, irrespective of whether the student has passed or failed in any Course.
	However, the rejection of performance of VIII semester project shall not be permitted.
	A student, who desires to reject the total performance of a semester including CIE marks, has to
	take readmission for that semester.
	Application for approval of readmission shall be sent to the Registrar through the Principal of
	College within 30 days from the date of the announcement of the results. Late submission of
	application shall not be accepted for any reasons.
	(b)Readmission to any semester in such cases shall not be considered as fresh admission and
	therefore the student will continue to have the same University Seat Number, which was allotted
	earlier. The Course duration (as per 180B1.4) will be counted with reference to old USN.
	•
	The student, who rejects only the results of University examination of a semester, shall be
	permitted to re-appear for University examinations of all the Courses of that semester in the subsequent examinations. However, the CIE marks obtained by the student in the rejected
	semester shall be retained.
	Applications for rejection and approval to reappear for University examination 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
	reasons.
	(c)If the rejection of results of University examination is of odd semester, the student shall be
	allowed to take admission to the immediate next even semester. However, if the rejection of
	results of University examination is of even semester, then the student shall not be allowed to
18 OB 8.13	Students who opt for rejection of results of University examination shall be eligible for the
18 OB 8.13	Students who opt for rejection of results of University examination shall be eligible for the award of degree and not for the award of ranks.

18 OB 8.14	(a) A student shall be declared to have completed the programme of BE / B.Tech degree and is eligible for the award of degree, provided the student has undergone the stipulated Course work of all the semesters under the same Scheme of Teaching and Examination and has earned the prescribed number of credits as per the provision 18 OB1.5.[To be read along with 18 OB 11.1 and 11.2] (b)Over and above the academic credits, every Day College regular student admitted to the 4 years Degree programme and every student entering 4 years Degree programme through lateral entry, shall earn 100 and 75 Activity Points respectively for the award of degree through AICTE Activity Point Programme. Students transferred from other Universities to fifth semester are required to earn 50 Activity Points from the year of entry to VTU. The Activity Points earned shall be reflected on the student's eight semester Grade Card. Activity Points (non-credit) have no effect on SGPA/CGPA and shall not be considered for vertical progression. In case a student fails to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. The student shall be admitted for the award of degree only after the release of the Eighth semester Grade Card. ■
18 OB 9.0	Attendance Requirement
18OB9.1	Each semester shall be considered as a unit for calculation of the attendance and the Candidates have to put in a minimum attendance of 85% in each Course with a provision of condonation of 10% 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 are to be submitted along with the recommendations.
18 OB 9.2	<ul> <li>(a) The basis for the calculation of attendance shall be the period prescribed by the University by its calendar of events.</li> <li>(b) For Course/s having lecture and tutorial hours, attendance shall be with respect to 85 % of attendance in lecture hours and 85 % of attendance in tutorial hours. If the attendance requirement is not satisfied in any one of them, the candidate shall be considered as not satisfied the attendance condition. Condonation of 10 % shall be applied separately to lecture and tutorial hour to make up the deficiency in attendance. Faculties shall also maintain the attendance of students of lecture and tutorial hours separately in the same register or in separate registers.</li> <li>(c) In case of late admission, approved by competent authority (DTE/VTU), to I semester, III semester (lateral entry scheme) of day college and III semester (lateral entry scheme) of Engineering Programme conducted during evening the attendance shall be reckoned from the</li> </ul>
18OB9.3	The Course Instructor/ Mentor/College shall inform the students as well as their parents /guardians about the attendance status periodically. Students who are facing the shortage of attendance shall be mentored to make up the shortage. Principals shall also notify every month, the list of candidates who are under short of attendance.
18OB9.4	A candidate, who does not satisfy the attendance requirement (in one or more Courses) as mentioned in 18OB9.1/18OB 9.2 (b) shall not be eligible to appear for the SEE of that semester and shall not be permitted to take admission to next higher semester. The candidate shall be required to repeat that semester during the subsequent year. ■

18OB 10.0	Vertical Progression (Promotion/ Eligibility to higher semesters)
18OB 10.1	There shall be no restriction for promotion from an odd semester to the next even semester, provided the student has fulfilled the attendance requirement. ■
18 OB 10.2	A student shall be declared failif the candidate
	(i) Fails to satisfy the conditions 18OB 8.9 (g).
	(ii) Absents himself / herself to the University examination.
	(iii) Is held guilty of examination malpractice and for any other reasons, and declared the
	performance of any Course/s null and void by a competent authority.
	(iv) Has not satisfied the CIE requirements of any credit Course/s.
10 OD 10 2	(v) Has not registered for the SEE even after satisfying the attendance and CIE requirements.
18 OB 10.3	<ul><li>(A) Vertical Progression in case of students admitted to First year:</li><li>(a) Students having not more than four F grades in the two semesters of first year of the</li></ul>
	Programme shall be eligible to move to II Year.
	(a.1) Students having not more than four F grades in the four semesters of I and II year shall be
	eligible to move to III year.
	(a.2)Student who have earned all the prescribed credits of I year, andhaving not more than four
	F grades in the four semesters of II and III year shall be eligible to move to IV year.
	(b) For the award of degree, a CGPA $\geq$ 5.00at the end of Programme shall be mandatory. [to be
	read with 18OB10.4 (1)]
	(B)Vertical Progression in case of Diploma students admitted to Second year (lateral entry)
	(a) Students having not more than four F grades (excluding the Fail or pass status of Additional
	Mathematics I and II) in the two semesters of II year of the Programme shall be eligible to move to III Year.
	(a.1) Students having not more than four F grades (excluding the fail status of Additional
	Mathematics I and II, if any) in the four semesters of II and III year shall be eligible to move to
	IV year.
	(b) For the award of degree, a CGPA $\geq$ 5.00at the end of Programme shall be mandatory. [to be read with 18OB10.4 (1)].
	(c) The mandatory non – credit Courses Additional Mathematics I and II prescribed at III and
	IV semesters respectively, to lateral entry Diploma holders admitted to III semester of
	BE/B. Tech programmes, shall attend the classes during the respective semesters to complete
	CIE and attendance requirements and to appear for the University examinations. In case, any student fails to satisfy the Course requirements, he/she shall be deemed to have secured F grade.
	In such a case, the student have to fulfil the requirements during subsequent semester/s to appear
	for SEE.
	(d) Completion of Additional Mathematics I and II, shall be mandatory for the award of degree.
	(C)Vertical Progression in case of B.Sc students admitted to Second year (lateral entry)
	(a) Students having not more than four F grades (excluding the Fail or pass status of
	Engineering Graphics and Design, and Civil Engineering and Mechanics of First Year
	Engineering Programme) in the two semesters of II year of the Programme shall be eligible to move to III Year.
	(a.1) Students having not more than four F grades (excluding fail status of Engineering Graphics
	and Design, and Civil Engineering and Mechanics of First Year Engineering Programme, if any)
	in the four semesters of II and III year shall be eligible to move to IV year.
	(b) For the award of degree, a CGPA $\geq$ 5.00at the end of Programme shall be mandatory. [to be
	read with 18OB10.4 (1)].
	(c) Lateral entrant students from B.Sc Stream, shall clear the non-credit Courses Engineering
	Graphics and Elements of Civil Engineering and Mechanics of the First Year Engineering
	Programme for the award of degree.

18 OB 10.4	<ul> <li>(1)Noncompliance of CGPA ≥ 5.00 at the end of the programme</li> <li>(i) Students who have completed all the courses of the programme but not having a CGPA ≥ 5.00 at the end of the programme, shall not be eligible for the award of the degree.</li> </ul>
	(ii) In cases of 18OB10.4 (1) (i), students are permitted to appear again for SEE in courses/s of any semester/s by rejecting the performance of the course/s [other than Internship, Technical seminar, Project (Mini and Main), and Laboratories] for any number of times, subject to the provision of 18OB1.4, to make up the CGPA equal to or greater than 5.00 for the award of the Degree.
	(iii) SEE result of the previous attempt course/s when rejected shall be irretrievable and the students should obtain written permission from the Registrar (Evaluation) to reappear in the subsequent SEE.
	(2)Noncompliance of Mini-project (a) The mini-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 mini-project shall be declared fail in that course and shall have to complete the same during subsequent University examination after satisfying the Mini-project requirements. Also, mini-project shall be considered for eligibility to VII semester.
	(3) Noncompliance of Internship  All the students admitted to III year of BE/B.Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credits shall be included with the credits of VIII semester. 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 in that Course and shall have to complete the same during subsequent University examination after satisfy the internship requirements.  ■
18 OB 11.0	Temporary Discontinuation/Break in the Programme
18 OB 11.1	(a) If a candidate, for any reason, temporarily discontinues the Programme or take a break from the Programme during any semester intentionally, he/she may be permitted to continue the Programme by registering to the same semester of the prevailing scheme. The candidate shall complete all the remaining Course work subject to the provision 18 OB 1.4. Also the Candidates may have to complete additional Course/s, if any, as per the decision of concerned Board of Studies and approval of Dean, Faculty of Engineering, on establishing the equivalence between two schemes. A Grade card shall be issued to that effect. Additional Course/s shall not be considered for the eligibility criteria prescribed for promotion. However, based on the individual cases, it is considered to decide the SGPA and CGPA to admit the student for the award of degree. Such candidates shall not be eligible for the award of rank.  (b) Candidates who take admission to any semester of the existing scheme from another scheme, as a repeater/fresher because of various reasons, including the case of 18OB11.1 (a), shall attend and complete all the remaining semester/s of the Programme adhering to the regulations of the prevailing scheme, and shall complete additional Course/s, if any, as per the decision of concerned Board of Studies and approval of Dean, Faculty of Engineering, on establishing the equivalence between two schemes. A Grade card shall be issued to that effect. Additional Courses shall not be considered for the eligibility criteria prescribed for promotion. However, based on the individual cases, it shall be considered to decide the SGPA and CGPA to admit the student for the award of degree. Such candidates shall not be eligible for the award of rank.  (c)The credits to be earned by the candidates under 18OB11.1 (a and b) and 18OB13.1(b) and (c) shall be decided by the University along with the additional Course/s to be completed. ■

18 OB 11.2	(i)The candidates who have temporarily discontinued the Programme of study or changed the scheme of study from one to another because of various reasons, or transferred from autonomous/other University to non-autonomous VTU affiliated college, shall be eligible for the award of degree provided the credits earned is equal to or greater than the credits decided by the University in the individual cases.  (ii) 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 Programme under the prevailing scheme, the candidate shall register for a Course not studied earlier and make up the credits earned equal to or greater than the required for the award of degree. ■
18 OB 12.0	Award of Prizes, Medals and Ranks
18 OB 12.1 18 OB 12.2	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 University for such awards.   (1) For award of rank in a Specialization of Bachelor of Engineering/ Technology, the CGPA secured by the students from III to VIII semester is considered.
	(2) A student shall be eligible for a rank at the time of award of degree of Bachelor of Engineering/ Technology, provided that the student
	<ul> <li>(a) (i) Has passed all the Courses of I to VIII semester in first attempt only in case of Candidates admitted I year.</li> <li>(ii) Has passed all the Courses of III to VIII semester in first attempt only in case of Candidates admitted under lateral entry scheme.</li> <li>(iii) Has completed all the prescribed mandatory noncredit Courses.</li> <li>(b) Is not a repeater in any semester because of rejection of result of a semester/ shortage of attendance etc.</li> <li>(c) Has completed all the semesters without any break/discontinuity.</li> <li>(d) Has completed all the semesters (I to VIII/III to VIII) in VTU constituent college or in any VTU affiliated non-autonomous college.</li> <li>(e) Has not been transferred from autonomous institution affiliated to VTU or from any other University.</li> <li>(3) The total number of ranks awarded shall be 10% of total number of students appeared in VIII semester subject to a maximum of 10 ranks in a Specialization.</li> </ul>
	<ul> <li>(4) For award of ranks in a Specialization, a minimum of 10 students should have appeared in the VIII semester examination.</li> <li>Illustration:</li> <li>(a) If 1228 students appeared for the VIII semester in Electronics and Communication Engineering Programme, the number of ranks to be awarded for Electronics and Communication Engineering shall be 10.</li> <li>(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.</li> <li>(5) In case of fractional number of ranks, it is rounded to higher integer only when the first decimal place is greater than or equal to 5. ■</li> </ul>
18 OB 12.3	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 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.

18 OB 13.0	Transfers of Students
18 OB 13.1	Transfer of students from one college to another college within the Karnataka state shall be permitted only at the beginning of third, fifth, and seventh semesters, subject to availability conseasts within the permitted intake in respective Colleges and subject to the prior approval of the University.
	(a) Transfer of students from one non - autonomous to another non - autonomous colleg affiliated to VTU is permitted with the approval of the Registrar, VTU subject to the provision 18OB10.3.
	<ul> <li>The students seeking transfer shall have to</li> <li>(i) Obtain No Objection certificate for admission from the University and from both the colleges before the commencement of term as notified by VTU.</li> <li>(ii) Complete the Programme subject to the provision 18OB1.4.</li> </ul>
	(b) Transfer of students from an autonomous to non – autonomous college, affiliated to VT is permitted with the approval of the Registrar, VTU provided the candidates have passed i all the Courses of the previous semesters.
	The students seeking transfer shall have to  (i) Obtain No Objection certificate for admission from the University and from both the colleges before commencement of term as notified by VTU.  (ii) Complete additional Course/s, if any, as per the decision of concerned Board of Studies and approval of Dean, Faculty of Engineering, on establishing the equivalence.
	between two schemes. A Grade card shall be issued to that effect. Additional Course, shall not be considered for the Eligibility criteria prescribed for promotion, Class, calculation of SGPA and CGPA. However, a pass in the additional Courses, if any, is mandatory before the completion of Degree.
	<ul> <li>(iii) Complete the Programme subject to the provision 18OB1.4.</li> <li>(c) In the case of students from Universities other than VTU, the students must have passed if all the Courses of I and II semesters for admission to III semester and all the Courses of I to V semesters for admission to V semester and all the Courses of I to VI semesters for admission to VII semester.</li> </ul>
	The students seeking admission from other Universities to VTU shall have to  (i) Apply for establishment of equivalence with prescribed fees as notified by the VTU an obtain No Objection certificate for admission from the University before the commencement of term as notified by VTU.
	(ii) Produce No Objection certificate for admission from both the colleges before the commencement of term as notified by VTU.  (iii) Complete additional Course/s, if any, as per the decision of concerned Board of Studies and approval of Dean, Faculty of Engineering, on establishing equivalence between two schemes. A Grade card shall be issued to that effect. Additional Course/s shall not be considered for the eligibility criterion prescribed for promotion, Class, calculation of SGP, and CGPA. However, a pass in the additional Courses, if any, is mandatory before the completion of Degree.
	<ul> <li>(iv) Earn the credits intimated by the University.</li> <li>(v) Complete the Programme subject to the provision 18OB1.4. ■</li> </ul>
18 OB 13.2	Transfer of students within the College from one branch to another branch at the start of I semester shall be permitted with the approval of the Registrar, VTU subject to the provision made by the Government of Karnataka and AICTE in this behalf.
18 OB 13.3	The University may prescribe fee for administration purpose, which shall be notified from time to time, for transfer from one college to another (Change of College) or one branch to another branch (change of branch within the college).

18 OB 14.0	Applicability and Power to Modify
18 OB 14.1	The regulations governing the D
18 OB 14.2	Visvesvaraya Technological University shall be a binding on all concerned.  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.

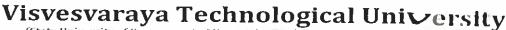


PRINCIPAL

Liva's Institute of Engg. & Tochnology, Mijar. MOODBIDRI - 574 225, D.K



ಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ದಾ ಚಿತ್ರಗ "ಜ್ಜಾನ ಸಂಗಮ", ಬೆಳಗಾವಿ-೫೯೦೦೧೮, ಕರ್ನಾಟಕ, ಭಾರತ



(State University of Government of Karnataka Established as per the VTU Act. "Jnana Sangama" Belagavi-590018, Karnataka, India Phone: (0831) 2498100, - Fax: (0831) 2405467, Website: vtu.ac.in

Dr. A. S. Deshpandeb.E., M.Tech., Ph.D.

Registrar

Fax: (0831) 2405467

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Ref: VTU/BGM/BOS/S02/2021-22/515

Date:

#### NOTIFICATION

Subject:

Regulation Governing B.E./B.Tech., programs under CBCS fro 111

academic year 2021-22 regarding...

Reference

1. EC Proceeding no. 2.2.1 of  $164^{th}$  meeting held on  $09.03.20 \ge 2$ 

2. EC Proceeding no. 2.2.1 of  $165^{th}$  meeting held on 26.04.2022

The regulations governing B.E./B.Tech., programs Under Outcome Based Education (OBE) and Choice Based Credit System (CBCS) effective from the Academic Year 2021-22 are here by notified. These regulations are applicable to all the students who are admitted to B.E./B.Tech. programs from the academic year 2021-22 for regular students and for lateral students admitting in the year 2022-23 and onwards.

All the Principals of Constituent /Affiliated Autonomous / non-Autonomous colleges coming under the ambit of University are hereby informed to bring the content of this notification to the notice of all concerned.

> By Order, Sd/-REGISTRAR

To,

- 1. All the Principals of Constituent /Affiliated Autonomous / non-Autonomous colleges coming under the ambit of University
- 2. The Chairperson, Department of Mechanical Engineering/Computer Science and Engineering of University

#### Copy to:

- 1. Hon'ble Vice-Chancellor through the Secretary to VC, VTU, Belagavi for kind information
- The Registrar (Eval.), VTU, Belagavi for kind information & necessary action.
- The I/c Regional Directors of all the Regional Offices of VTU for information and circulate to colleges among your respective region.
- 4. The Director (1/c) ITI SMU VTU Belagavi for information and request to make arrangement for uploading on VTU web portal.
- The Special Officers of Academic Section, VTU, Belagavi for information

1/1



# Regulations Governing the Degree of Bachelor of Engineering/Technology (B.E./B.Tech.) Effective from the Academic Year 2021-22

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#### **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. Semester: Refers to one of the two sessions of an academic year (vide: serial number 3), 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.
- 3. Academic Year: Refers to two consecutive semesters (odd followed by an even) sessions, including intervening periods.
- 4. Course: Usually referred to as subject and is a component of a Program. All Courses may not carry the same weightage. Each Course will have course objectives and course 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 components etc., or a combination of some of these.
- 5. Credit: Refers to a unit or weightage by which the Coursework is measured. It represents the number of hours of instructions prescribed per week. One credit is equivalent to one hour of lecture or two hours of laboratory/practical Courses/ tutorials/ fieldwork etc., per week.
- 6. Choice Based Credit System (CBCS): The education model refers to customizing the Coursework, through Core, Professional Elective, Open Electives, Skill-based ability Enhancement Courses, Non-Credit Mandatory Courses, and Internships to provide the necessary support for the students to achieve their goals.
- 7. Course Registration: Refers to formal registration to Courses of study in every semester by every student under the supervision of a Faculty Advisor (also called Mentor, Counsellor, Class teacher, etc.), in the Institution to maintain the proper record. Registration to the University portal is mandatory.

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- 8. Course Evaluation: Represents the measurement of the impact of the teaching-learning process and offers an opportunity for improving the quality of learning in courses and teaching performance. Courses evaluation is done by adopting different methods—such as tests, quizzes, assignments, etc., during the teaching-learning period at the end of some modules or chapters of syllabus contents and at the end of the semester. While the former part of the evaluation is called the Continuous Internal Evaluation (CIE) and the later—part of the evaluation is called Semester End Evaluation (SEE).
- 9. Continuous Internal Evaluation (CIE)(also known as formative assessment): Refers to the evaluation of students' performance in the course during the teaching-learning process. CIE shall be done by the faculty teaching course and evaluation components may include tests, assignments, group discussion, quizzes, course-specific projects, seminars, etc., conducted during the semester tenure with a weightage for different activities as specified by the University.
- 10. Semester End Examinations Evaluation (SEE) (also called summative assessment): Refers to the examinations conducted by the University covering the entire Course Syllabus. For this purpose, Syllabi shall be modularized, and SEE questions shall be set from each module as specified by the University.
- 11. First Attempt: Refers to some students who have studied in a current semester and have attended any one of the University examinations of that semester after satisfying attendance and CIE requirements of all the prescribed courses of that semester and registering for SEE. Such an attempt shall be considered as the first attempt. Even if students absent themselves for all the semester examinations after registering for SEE, such an attempt shall also be considered the first attempt.
- 12. 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.

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Table-1, Calculation of Credits

Credit Values					
Theory/Lectures (L) (hours/week/Semester)	Tutorials (T) (hours/week/Semester)	Laboratory/ Practical (P) (hours/week /Semester)	Credits (L:T:P)	Total Credits	
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		
0	1	1	0:0.5:0.5	1	
0	0	2	0:0:1		

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

- 13. Non-Credit Mandatory Course (NCMC): In the case of non-credit mandatory courses, students shall attend the classes during the respective semesters to satisfy the attendance requirements and as well as CIE requirements. 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 not satisfied. 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.
- 14. Letter Grade: Course Letter Grade (or simply letter grade or grade) is an index of performance of a student in a said course and refers to a qualitative measure of achievement of a student in each course, based on the percentage range of marks secured in CIE and SEE put together or CIE alone. Grades are denoted by letters O, A, B, C, D, E, and F. The rubrics attached to letter grades are as follows:
  - O Outstanding, A+ Excellent, A Very Good, B+- Good, B Above Average, C Average,

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- P- Pass and F Fail. If a student remains absent for SEE of any of the course/s, the letter grade assigned to that course shall be F. If a student is not eligible for appearing, SEE due to non-comply of any of the course/s then the letter grade assigned against that course shall be NE
- 15. Grade Point (GP): Refers to a numerical weightage allotted to each letter grade on a 1 O-point scale against a preconceived range of percentage of marks secured by students in a course as shown in Table 2.

Table 2, Letter Grade and corresponding Grade Points on a typical 10 - Point scale

	Letter Grade and corresponding Grade Points on a typical 10 - Point scale							
Letter	0	A+	A	B+	В	С	P	F
Grade	Outstanding	Excellent	Very Good	Good	Above Average	Average	Pass	Patt
Grade Point	10	9	8	7	6	5	4	0
% of Marks secured	90-100	80-89	70-79	60-69	55-59	50-54	40-49	0-39

- 16. Passing Standards: Refers to passing a Course only when GP is greater than or equal to 04.
- 17. Credit Point: This is the product of GP and number of credits for a Course i.e., Credit points (CrP) = GP × Credits for the Course.
- 18. Semester Grade Point Average (SGPA): Refers to the measure of a student's academic performance in a semester. It is the weighted average or weighted mean of the grade points obtained by a student in the various courses of any semester. It results in a number that lies between 0 and 10.
- 19. Cumulative Grade Point Average (CGPA): This is a measure of the cumulative performance of a student of all semesters and is computed from the 2<sup>nd</sup> semester onwards. It is a measure of the overall cumulative academic performance of a student over the entire span of the academic program. CGPA is not an arithmetic mean a but weighted mean. It is also a number that lies between 0 and 10.
- 20. 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 shall have the Program details (Course code, title, number of credits, grades secured, number of attempts, and alternate course taken instead of successive failure after 4 attempts) along with the SGPA of that semester and CGPA (except for the first semester) earned till that semester.



- 21. Academic Bank of Credits (ABC): The Academic Bank of Credits (ABC), is a natio mal-level facility which will promote the flexibility of the curriculum framework and interdisciplinary/multidisciplinary academic mobility of students across the HEIs in the country with appropriate "credit transfer" mechanism.
- 22. Multiple Entry Multiple Exit: The multiple entries and exit points in the academic programs offered at Higher Education Institutions (HEIs) would remove rigid boundaries and create new possibilities for students. There are occasions when learners have to give up their education mid-way for various reasons. To facilitate flexible learning within the stipulated period (eight years for regular students and 06 years for lateral entry students), multiple exist and entry options are given to the needy students. The student can exit from the program only at the end of the even semester/s (2nd, 4th, and 6th semester) and the entry option is provided to the students at the beginning of the odd semester/s (3rd, 5th and 7th semester).

23. University: Visvesvaraya Technological University (VTU), Belagavi.





210B1.0	Title and Credits of the Program of Study.					
	210B1.1 The Program of study shall be called the degree of Bachelor Engineering/Bachelor of Technology, abbreviated as B.E./B.Tech.					
	210B1.2	Prescribed Number of Credits for the Program				
		<ul> <li>(a) The total number of credits to be earned by students admitted to the first semester of 04 years B.E./B.Tech., the program shall be 160.</li> <li>(b) The total number of credits to be earned by students admitted to the third semester of 04 years B.E./B.Tech., program under lateral entries scheme shall be 120.</li> </ul>				
		(c) A student shall be eligible to obtain an Undergraduate degree with Honours / Minors, if he/she earns minimum additional 18 credits, a specified by university norms from time to time regarding the earning of additional credits[To be read along with Regulations Governing the Award of Honors/ 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				
		<ol> <li>2 hours Practical/Laboratory/Drawing (P) per week per semester</li> <li>=1 Credit.</li> </ol>				
		<ol> <li>Four-credit theory courses shall be designed for 50 hours of the Teaching-Learning process.</li> </ol>				
10		<ol> <li>Three-credit theory courses shall be designed for 40 hours of the Teaching-Learning process.</li> </ol>				
		6. Two-credit theory courses shall be designed for 25 hours of the Teaching-Learning process				
		7. One credit theory course shall be designed for 15 hours of the Teaching-Learning process				
OB2.0	Academic E	ligibility for Admission				
	210B2.1	Admission to 1st year: 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				

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	210B2.2	the PUC II examination of the Pre-University Education Board of Karnataka, have to obtain an eligibility certificate for seeking admission to 1st year B.E./B.Tech. Degree Program from Visves varay. Technological University, Belagavi.  Admission to 2ndyear (Lateral Entry): Eligibility for candidates who have Passed a 3-years Diploma in Engineering and B.Sc. Degree  I. As notified by the Government of Karnataka and university from time to time for admission to 3nd-semester B.E./B.Tech., degree program  II. Those candidates who have completed Engineering Diploma from other than Karnataka state shall submit the Equivalence/ Eligibility Certificate			
	210B2.3	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 in this regard shall be final and binding on all concerned.			
210B3.0	Minimum and Maximum Duration of the Program				
	210B3.1	Students admitted to first-semester B.E./B.Tech., shall complete the program within eight academic years from the year of the first admission, failing which they will not be eligible for the award of a degree Students admitted to third semester B.E./ B.Tech., under the lateral entry category shall complete the program within six academic years from the year of the first admission, failing which they will not be eligible for the award of degree.			
		4-2			



210B4.0	Courses and Course Registration				
	210B4.1	There shall be the following types of Courses:			
		(a) Humanities, Social Sciences, and Management Courses ( <b>HSMC</b> These are mandatory for all disciplines.			
		(b) Basic Science Courses (BSC): Physics, Chemistry, and Mathematics These are mandatory for all disciplines.			
		(c) Engineering Science Courses (ESC): Materials, Workshop, Drawing and Basics of Electrical/ Electronics/ Civil/ Mechanical/ Computer Engineering, etc. These are mandatory for all disciplines.			
		(d) Professional Core Courses (PCC): These are the professional Core Courses, relevant to the chosen specialization/ branch. The core courses shall be compulsorily studied by students and it is mandatory to complete them to fulfill the requirements of a Program.			
		(e) Professional Elective Courses (PEC): These 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): These are the Elective Courses from other technical areas and/ or from emerging fields. Students of other departments shall opt for these courses to fulfilling of eligibility and prerequisite mentioned in the syllabus.			
		(g) Integrated Professional Core Courses (IPCC): It refers to Professional Theory Core Course Integrated with Practical of the same course. Credit for IPCC shall be 04 considering L: T: P as 3:0:1 or L:T:P as 2:1:1, (where L,T and P represents credits not hours per week)			
		(h) Project Work: Mini-project and Project work carried out at the parent Institution or any university / Government recognized organization without affecting the regular class work.			

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	(i) Seminar: Each student has to present the seminar on specific tople
	chosen from the relevant field /list provided by the department
	under the supervision of a faculty coordinator.
	(j) Internship (INT): The internship (a form of experimental learning)
	program not only helps fresh pass-outs in gaining professional
	know-how but also benefits corporate sectors. The internship also
	enhances the employability skills of the student passing out from
	Technical Institutions
	(k) Non-Credit Mandatory Courses (NCMC): These Courses are
	mandatory, without the benefit of a grade or credit, passing in each
	mandatory Course is required to qualify for the award of degree.
	(l) Ability Enhancement Courses (AEC): These courses are designed to
	help students to enhance their skills in communication, language,
	and personality development etc. They also promote a deeper
	understanding of courses like social sciences, ethics, culture, human
	behavior human rights, and the law. 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 at the Institution, every
	student shall register for the Courses of a semester (Credit) under the
	supervision of a Faculty Advisor (also called Mentor, Counselor, class
	teacher, etc.,) at the beginning of each semester. The registration of courses
	in each semester with the University portal is mandatory.
	por with indicatory.

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	21084.3	The minimum number of students registered to any professional Elective Course/Open Elective Course /Ability Enhancement course (from 300 semester onward) offered by the Departments shall not be less than ten. In such cases. If the number of registrants for the elective course is less than 10, 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 professional Elective Course/Open Elective Course/Ability Enhancement course is to be offered in that college.				
	21084.4	A student shall exercise the option in respect of a higher sernester professional Elective Course/Open Elective Course /Ability Enhancement course 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 preferably 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	Every prescribed course shall be considered as a unit for the calculation of attendance. All students are required to attend all the lectures, tutorials, practicals, and other prescribed curricular and co-curricular activities, and thus the attendance is 100%. However, the candidate has to put in a minimum attendance of 85% in each course with a provision for condoning up to 10% 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 NSS/NCC/Red cross/National level Republic Day and Independence Day Parade/participation in University/State/ National/ International levels ports 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).				



		The internship is an extended period of work experience undertaken by
	210B6.1	Internship:
210B6.0	Internship	
		These courses of shortage of attendance will not be considered for vertical progression.
		The student will repeat the course/s in which he/she falls short of attendance only, whenever the course/s is offered next.
	210B5.5	If a student fails to satisfy the attendance requirement of the course/s of the semester, he/she will not be permitted to appear for SEE of that course/s. However, the student will be allowed to appear for the Semester End Examination (SEE) for other courses of the semester.
	21085.4	A student who does not satisfy the attendance requirement in one or more 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 grade card for such courses shall be marked as NE (not eligible). The candidate shall be required to repeat that course/s whenever that course/s offered next.
	21085.3	The Course Instructor/ Mentor/Class-teacher or the College office 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.
	210B5.2	<ul> <li>a) The basis for the calculation of attendance shall be the period prescribed by the University by its academic calendar of events and a notified by the Registrar.</li> <li>b) In case of late admissions, approved by competent authority (KEA/DTE/VTU), to I semester (for the regular scheme) and II semesters (for lateral entry scheme) of Engineering Program, the attendance shall be reckoned from the date of admission to the Program.</li> </ul>

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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.

The Internship shall be completed during the period specified in the Scheme of Teaching and Examinations. There will be three internships:

1) Inter/Intra Institutional Internship: (In the case of the students admitted to 1st-year B.E./B.Tech. program) All the students admitted to engineering programs shall have to undergo a mandatory summer internship of 03 weeks during the intervening semester period of the II and III semesters. The internship shall include Inter / Intra Institutional activities (refer to Annexure-IV). CIE shall be carried out during the Internship period/III semester and prescribed marks shall be included in the IV semester grade cards.

Inter/Intra Institutional Internship: (In case of students admitted under Lateral Entry): All the students admitted to engineering programs under the lateral entry category shall have to undergo a mandatory internship of 03 weeks during the intervening semester period of the III and IV semesters. The internship shall include Inter / Intra Institutional activities (refer to Annexure-IV). CIE shall be carried out during the Internship period/IV semester and prescribed marks shall be included in the IV semester grade cards.

Inter /Intra Institutional Internship will have only CIE and no SEE.

2) Innovation/Societal/Entrepreneurship-based During the intervening period of IV and V semester the Internship of 04 weeks period shall carried out in industries /Govt. organization/NGO/MSME. Focus be may given Rural Internship/Innovative activities and Entrepreneurship (Social/Industrial). CIE shall be carried out during the Internship period/V semester and prescribed marks shall be included in the VI semester grade cards. Innovation/Societal/Entrepreneurship based, will have only CIE and no SEE.

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3) Research Internship/Industry Internship of 24 weeks duration: At the beginning of the IV academic year, students can opt for VII semester course work or VII semester Internship depending on the opportunities available for enrolling to either Research Internship or Industry Internship. With reference to this, both VII and VIII serresters shall be in progress simultaneously. Research Internship / Inclustry Internship shall be carried out at Industry / government organizations, non-governmental organizations (NGOs)/ Micro, Small & Medium Enterprises (MSME) /Research and development organizations/Organizations of National or international repute/Institution Research Centers / Innovation and Incubation Centres/Start-ups /entrepreneur cells. The institution shall encourage students to take up (i) interdisciplinary Research Internship or Industry internship and (ii) rural internship, a work-based activity carried out to learn practical experiences in rural areas, for the upliftment of living standards. In case students want to undergo an internship at his/her family business, he/she shall be permitted to provide; a declaration by a parent that is submitted directly to the Principal of the Institution. With the consent of the internal guide and Principal of the Institution, students shall be allowed to carry out the internship at their hometown (within or outside the state or abroad), provided favourable facilities are available for the internship and the student remains regularly in contact with the internal guide.

University shall not bear any cost involved in carrying out the internship by students. However, students can receive any financial assistance extended by the organization.

University Viva-Voce examination shall be conducted at the end of the internship period. Research Internship /Industry Internship shall be considered as head of passing and shall be considered for the award of the degree. Those who do not complete the internship shall be declared fail and shall have to complete it during subsequent University





examinations after stratifying the internship requirements cluring subsequent semesters.

### Responsibilities of Department and Guides:

- 1. The Department/college shall nominate department coordinator /staff member/s to facilitate, guide, and supervise students under interraship.
- 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/diary 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 100 marks for CIE for Inter/Intra Institutional Internship and Innovation/Societal /Entrepreneurship based Internship. For Research /industry internship 100 marks for CIE and 100 marks for SEE. The minimum requirement of CIE and SEE marks shall be 40% and 35% of the maximum marks respectively. In total, the student has to secure 40% of the course maximum marks i.e., the sum of the CIE and SEE marks prescribed for the course.
- 5. The internal Guide and one senior faculty shall be the internal examiners for CIE Inter/Intra Institutional Internship and Innovation/Societal/Entrepreneurship based Internship.
- 6. For Research /Industry Internship, 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.
- 7. In case, the external Guide expresses his/her inability to conduct the Examination, the Principal /examination Chief Superintendent of the Institute appointed by the University shall appoint a senior faculty of the Department to conduct the Examination along with the internal Guide.

210B7.0 Technical Seminar

210B7.1 Technical Seminar: Technical Seminar is one of the heads of passing.



	255	i. Each student has to present the seminar on a specific topic chosen from
		the relevant field /list provided by the department under the supervision of a faculty coordinator.
210B8.0	210B8.1	ii. The Head of the Department/designated coordinator for technical seminar shall make arrangements for the conduct of seminars through a committee of faculty members of the Department. The committee constituted for the purpose of the Head of the Department, shall award the CIE marks for the seminar. The committee shall consist of three senior faculty members of the Department and the senior-most among them is to act as the Chairperson. There is no SEE for the seminar.  Mini-Project: 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  Based on the ability/abilities of the student/s and recommendations of the mentor, a single disciplinary or a multidisciplinary Mini-project can be assigned to an individual student or a group having not more than 4 students.
		There is only CIE and no SEE for Mini-Project.
	21088.2	Project Work: Based on the ability/abilities of the student/s and recommendations of the mentor, a single disciplinary 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 may be published /patented.
210B9.0	Continuou	s Internal Evaluation (CIE)
	21089.1	At the beginning of the semester, the course instructor or the faculty who is teaching the course shall have to announce the methods used for CIE.  Continuous Internal Evaluation Procedure:  The minimum CIE marks to be secured in all courses shall be 40% of the maximum marks for successful completion of courses having only CIE marks and appearing for SEE in case of courses having both CIE and SEE



210B9.1a

marks. (refer Annexure VIII)

### Theory Courses (03 Credits):

Three 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 10th week of the semester
- Third test at the end of the 15th 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

Seminar/quiz/group discussion suitably planned to attain the COs and POs for 20 Marks (duration 01 hours)

The total CIE marks shall be the sum of the marks secured in each of the tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be scaled down to 50 marks.

210B9.1b

**Integrated Professional Core Courses (IPCC):** Theory Integrated with practical Courses. **(4 Credits)** 

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

### CIE for the theory component of IPCC

Two 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  $10^{th}$  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 IPCC

 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 15th 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 tests added will be CIE marks for the laboratory component of IPCC for 20 marks.

• The minimum marks to be secured in CIE to appear for SEE shall be the 12 (40% of maximum marks) in the theory component and 08 (40% of maximum marks) in the practical component. The laboratory component of the IPCC shall be for CIE only. However, in SEE, the questions from the laboratory component shall be included. The maximum of 05 questions to be set from the practical component of IPCC, total marks of all questions should not be more than the 25 marks.

The theory component of the IPCC shall be for both CIE and SEE.

#### 210B9.1c

### Theory Course with 01 credit

Three Tests (preferably in MCQ pattern with 20 questions) 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

- 1. First assignment at the end of 4th week of the semester
- 2. 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 shall be scaled down to 50 marks

210B9.1d

Theory Course with 02 credits

CIE will same as 1 credit theory course for the 1st and 2ndsemester; however, for higher semesters depending upon the type of the course, the CIE pattern may be MCQ type (100 questions) 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, the instructor/faculty teaching the course has to announce the methods of CIE for the course.

210B9.2 210B9.2a Engineering Graphics/ Drawing /Field Works:

Engineering Graphics / Drawing / Engineering Visualization Course

- 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 30 marks.
- 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 shall 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(CIE) of Field Work



Surveying Practice / Socio-Economic survey/ Marketing survey/traffic survey/ 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 shall be decided by the faculty member who is guiding them for the design drawing and report. The criteria for split-up of marks shall be done to achieve the course outcomes. The report evaluation shall be carried out for 100 marks and scored marks shall be scaled down to 40 marks.

The assessment shall be through a presentation of the report followed by the viva-voce. This test shall be conducted by the fieldwork project guide and fieldwork coordinator. If the fieldwork coordinator happens to be the same faculty then, HOD or senior faculty member 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. Spit up of marks for the evaluation of the journal/write-up for hardware/software experiments designed by the faculty who is handling the laboratory session and shall be made known to students at the beginning of the practical session. (Split-up of marks for CIE is as 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 shall be scaled downed to 30



marks (60% of maximum marks).

- Weightage to be given for neatness and submission of record/writeup on time.
- Department shall conduct 02 tests for 100 marks, the first test shall be conducted after the 8th week of the semester and the second test shall be conducted after the 14th 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 split up of marks can be designed to evaluate each student's performance and learning ability (Split-up of marks is as 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 taken up during the period specified in the Scheme of Teaching and Examinations.

The Department/ College shall nominate faculty 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

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maintain the progress record of the candidates undergoing internship.

### **Duration of Internships**

- Inter/Intra Institutional Internship 03 weeks
- Innovation /Societal /Entrepreneurship based Internship ()4 weeks
- Industry / Research Internship 24 weeks

There shall be only a CIE of 100 marks for Inter/Intra Institutional Internship and Innovation /Societal /Entrepreneurship based Internship.

Inter/Intra Institutional Internship and Innovation /Societal /Entrepreneurship based Internship (refer 210B6.1, part B point 4 and 5). However, Research / Industry internship will have both CIE and SEE components (refers to 210B6.1, part B point 6 to 9).

**Report evaluation** for Research / Industry internships shall be evaluated for 50% maximum marks - The split-up of marks suggested for report evaluation shall 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 split-up of marks suggested are

For a demonstration of (soft) skills/Engineering Knowledge gained

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(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 Viva-voce)

  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:

The Technical Seminar performance evaluation shall be through CIE only. The Technical Seminar is one of the heads of passing. The maximum marks prescribed for CIE shall be 100. The 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.

The Head of the Department shall make arrangements for the conduct of seminars through a committee of 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 three senior faculty members of the Department and the senior-most acting as the Chairperson.

#### Split up of Marks suggested

### Report marks to be allotted by the seminar guide/s

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

Seminar Presentation marks to be allotted by the committee: (25 marks)

### Viva-Voce (Question answer session): 25 marks

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

**210B9.6** Mini – Project: (also refer 210B8.1 page 15)

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The Mini-Project shall be under CIE only. The maximum marks prescribed for CIE shall be 100. 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.

50 marks of CIE for the report shall 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 two senior faculty members of the Department. This committee shall evaluate Mini-project Work for 50 marks considering project presentation and question-answer session.

- Project presentation: 25 marks
- Question and answer session:25 marks

#### 210B9.7

**Project Work:** The project work shall be evaluated considering both CIE and SEE; the maximum mark for CIE is 100.

The maximum marks prescribed for CIE shall be 100. The CIE marks awarded for Project Work shall be based on the evaluation of the Project Report, Project Presentation skill, and Question and Answer session in the ratio of 50:25:25. The marks awarded for the Project report shall be the same for all the batch mates.

50 marks of CIE for the report shall be evaluated by the faculty guide /mentor who is guiding the project work.

The Head of the Department shall make arrangements for the conduct of viva-voce evaluation of the project work. The committee shall consist of a guide/mentor and two senior faculty members of the Department. This committee shall evaluate Project Work for 50 marks considering project presentation and question-answer session.



	Project presentation: 25 marks					
	Question and answer session:25 marks					
	Split-up of marks to be followed for evaluation is suggested in Annexure-II					
210B9.8	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 3 years after the announcement of University					
	results and shall be made available for verification as per the direction					
	of the Registrar (Evaluation).					
210B9.9	Maximum and Minimum CIE and SEE Marks:					
	The maximum CIE marks shall be 50. To appear for the SEE, the minimum					
	CIE marks to be secured in all the courses shall be 40 % of the maximum					
	marks.					
	Inter/Intra Institutional Internship and Innovation /Societal					
	/Entrepreneurship based Internship, Technical Seminar, Mini-Project					
	Works will have only CIE component, maximum CIE marks shall be 100.					
	Minimum CIE marks to be secured shall be 40% of the maximum marks, to					
	qualify in these courses.					
	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 40% of the maximum marks i.e., 40 out of 100 marks.  Maximum and Minimum SEE Marks:  The maximum SEE marks for Research /Industry Internship, Major Project					
	Work is 100, and minimum SEE marks to secure shall be 35% of the					
	maximum marks i.e. 35 marks.					
	For remaining all the courses mentioned in the scheme of teaching and					
	examination maximum SEE marks are 50 and minimum SEE marks to					
	secure shall be 35% of the maximum marks i.e. 18marks					
	No SEE component for Inter/Intra Institutional Internship and					
	Innovation/Societal /Entrepreneurship based Internship, Technical					
210B9.10	Seminar and, Mini Project.					
	Any corrections or overwriting of CIE marks on the blue book/drawing					
delication of	sheet laboratory record etc., where CIE marks are awarded, shall bear the					



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	signature(s) of concerned Teacher(s) and the Head of the Department
21089.11	CIE marks shall reach the University before the commencement examinations as per the notification from the office of the Registre (Evaluation) from time to time. After submission of CIE marks to the University, any request under any circumstances for change of CIE marks shall not be considered.
21089.12	<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 a fail in that Course /those Courses and marked as NE in the grade card against this course/s. 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 requirements can be permitted to register afresh and appear for SEE after satisfying the CIE requirements in the same Course(s) when offered during the next immediate semester/s or later.</li> <li>iii. Each appearance to SEE or absence after completing CIE and attendance requirements to complete a course shall be treated as an attempt.</li> <li>iv. The student shall be permitted to register for total courses not exceeding 28 credits. These 28 credits include the courses of the regular semester and backlogs. The registration of these additional credits includes the courses having a shortage of attendance and the courses whose CIE requirements are not fulfilled. A student has to pay the prescribed fee as notified by the University from time to time.</li> </ul>
210B9.13	CIE marks of those students, who come under 210B9.12 (i) and (ii), shall also be sent to the Registrar (Evaluation) along with other course CIE Marks.
1089.14	<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 Work/Major-Project Work shall be displayed on the</li> </ul>

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notice board of the college much before the closure of the semester.

ii. The college/institution shall enter the CIE marks of each semester in the format of the University 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.

#### 210B9.15

### **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 Moderating 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.

### Guideline for the moderation Committee-

Moderation may be conducted after each test or after the tests in case there is a large number of fail grades or higher letter 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.

- Split-up of marks used for each of the different types of assessment in the course to be checked
- Checking of the questions whether it maps with course outcomes.
- Checking of the level of difficulty of questions paper i.e is difficulty level on the extremes, very easy or otherwise.
- Whether the assessment modes are used to cover the entire syllabus or not.

1-2



	<ul> <li>Checking the manner of awarding the marks, i.e has correction be at the extremes, liberal or tough.</li> <li>Moderation should not be restricted to just assessment but also includes to</li> </ul>
2402400	assessment design (scheme of evaluation).
210B10.0	Semester End Examination (SEE) Marks and Passing Standards
	a. University examination for all Courses under SEE shall be conducted a maximum of 100 Marks. The marks secured by the students for 10 marks shall be proportionately scaled down to a maximum of 50 mark 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.  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 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  f. For Practical/Fieldwork/ 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. Inter/Intra Institutional Internship, Innovation /Societal /Entrepreneurship based Internship, Technical Seminar and Mini-



- g. For 24 weeks of Research / 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 0 to P in a course shall be considered to have passed that course.
- i. A student shall be declared fail if he/she
  - Fails to satisfy the conditions (h) above
  - Absents himself/herself to the University examination.
  - 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.
  - The course/s in which student/s fail to satisfy attendance and CIE requirement (NE courses) are also considered as F only.
- 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 NE (not eligible to appear for SEE due to non-comply of attendance and CIE) cases.

The sum total of CIE and SEE marks must be 40% of the maximum marks prescribed for a course as per the scheme of teaching and examination.

#### 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 course(duration 03 hours)

- 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), should have a mix of topics under that module.



210B10.1b

The students have to answer 5 full questions, selecting one full question from each module.

Integrated Professional Core Courses (IPCC): Theory Integrate cl with Practical Course

SEE for the theory part (Duration 03 hours) is the same as that merationed in serial no. 02 (questions mentioned in the SEE paper shall include questions from the practical component).

210B10.1c

### Theory Course with 1 Credit

SEE paper shall be set for 50 questions, each of 01 mark. The pattern of the question paper is MCQ (multiple choice questions). The time allotted for SEE is **01 hour** 

210B10.1d

#### **Theory Course with 2 Credits**

SEE paper will be set for 100 questions each of 01 mark. The pattern of the question paper is MCQ (multiple choice questions). The time allotted for SEE is 120 minutes. Marks scored are scaled down to 50 Marks.

The suggested question paper pattern is MCQ for the  $1^{st}$  and  $2^{nd}$  semester however, for higher semester/s depending on the type of the course SEE may be a written examination, a pattern similar to other theory courses as mentioned in clause 210B10.1a

210B10.1e

### **Engineering Graphics and Drawing(Laboratory Course)**

SEE shall be conducted and evaluated for maximum marks 100. Marks obtained shall be accounted for SEE final marks, reducing it by 50%

- 1. SEE will be conducted by the two examiners of same institute one act as Internal Examiner and other act as External Examiner.
- Question paper shall be set jointly by both Internal and External Examiner and made available for each batch as per schedule. Examiners may refer question bank.
- 3. Evaluation shall be carried out jointly by both the examiners as per the scheme.



Scheme of Evaluation: To be defined by the examiners jointly as per VIII norms

#### 210B10.1f

#### Fieldwork

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 shall 50 Marks.

SEE shall be conducted jointly by the two examiners of the same institute one act as internal and another as external examiner. Examiners are appointed by the University.

- All laboratory experiments are to be included for practical examination.
- 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, a split-up of marks for evaluation 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 split-up of marks for SEE mentioned are procedure / writeup-20%, Conduction and result in 60%, Viva-voce 20% of maximum marks.
   SEE for the practical course shall be evaluated for 100 marks and scored marks shall be scaled down to 50 marks (however, based on course type, split-up of the marks shall be decided by the examiners)
- Change of experiment is allowed only once and 20% Marks allotted to the procedure/write-up 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 Research /Industry Internship SEE shall be conducted by the Internal and external examiners approved by the university. The internal examiner shall be the guide for 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 Examiner's shall jointly award the SEE marks. In case the external Guide expresses his inability to conduct the Examination at the last moment, the Principal /Chief Superintendent appointed by the university for the concerned examination of the Institute shall appoint a senior faculty of the Department to conduct the Examination along with the internal Guide. Split up of marks for evaluation may be the same as suggested for $\mathbf{CIE}\ \mathrm{or}$ Internal and external examiners shall devise split up of marks for SEE and the same may be submitted to the University along with evaluation marks. 210B10.1i **Project Work:** As project work is evaluated for 200 marks (CIE: 100 marks, SEE:100 marks), the marks awarded in SEE for 100 marks must take as it is to decide the letter grade along with the CIE marks also awarded for 100 marks. SEE for Project Work 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 jointly by the examiners. Split up marks to be followed are suggested for CIE or Internal and external examiners shall decide the split-up of marks for SEE and the same may be submitted to the University along with evaluation marks 210B10.2 Rejection of Result: 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

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210B10.3

### Regulations Governing the Degree of Bachelor of Engineering/Technology (B.E./B.T ch.) Under Outcome Based Education (OBE) and Choice Based Credit System (CBCS) Effective from the Academic Year 2021-22

performance in University examinations (SEE) of a semester. The rejection is permitted only once during the entire Program of study.

Students who desire to reject the SEE results of a semester shall reject the total performance (irrespective of the earned Course grades) in sell the

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 **readmission** and

Maximum duration clauses (210B14.1-7 and 210B3.1)

- (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.
- (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 (applicable only from 3<sup>rd</sup> semester onwards as per clause no. 210B14.1-1).
- (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 University Seat Number (USN).
- (iv) Applications for rejection of results excluding CIE 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, with prescribed fee as notified by the university from time to time. Late submission of applications shall not be accepted for any reason.
- (v) Application for rejection of results including CIE and approval for

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		readmission shall be sent to the Registrar through the Principa 1 of the
		College within 30 days from the date of the announcement of the
		results with prescribed fee as notified by the university from time to
		time. Late submission of application shall not be accepted for any
		reason.
	210B10.4	Registration for SEE is compulsory if the student/s has satisfied the
		attendance and CIE requirement of ODD /EVEN semester.
8		In case, the students fail to register for SEE of the odd semester after
		satisfying the attendance and CIE requirements of the semester, they shall
		be permitted to move to an even semester of that academic year. However,
		such students have to register for odd semester examinations conducted
		at the end of the academic year for all the semesters and registration shall
		be considered for the first attempt.
		In case, students fail to register for odd semester SEE after completing
		successfully the even semester, they shall not be permitted to move to the
		higher odd semester of the subsequent academic year. Irrespective of
		student appearing for SEE, he/she has to register for SEE of odd and even
		semesters before completing the academic year.
	210B10.5	Students who opt for rejection of results of University examination shall be
		eligible for the award of the degree and Minor Degree but not for the award
		of ranks and Honors degree.
210B11.0	Multiple En	ntry and Exit Option
	210B11.1	Entry 1: (at 1st semester) A program of study leading to entry into the first
		year of the Bachelor's degree is open to those who have met the entrance
		requirements, including specified levels of attainment at the secondary
		level of education specified in the program admission regulations at clause
		no. 210B2.1
		Exit 1: The exit option is given to the student at the end of year 1 (after the
		2nd semester). The student has to complete all academic requirements of 1st
		year of the undergraduate program and earned requisite credits of 1st and
		2nd semester and recommendation of the counselling team of the Institute.



#### 210B11.2

Entry 2: (at 3rd semester) A program of study leading to the second year of the Bachelor's degree is open to those who have met the entrance requirements, including specified levels of attainment, in the program admission regulations clause no. 210B2.2. Admission to a program of study is based on the evaluation of documentary evidence (including the academic record) of the applicant's ability to undertake and complete a Bachelor's degree program.

This option is open to those who have left after completion of the 1st year of the program and want to join back for the continuation of their study subject to the condition of a maximum duration of 8 years from the date of 1st admission.

Student opting for multiple entries a3rd-semester level has to undergo a mandatory Summer Internship-I (21INT49) of 03 weeks during the intervening period of semester III and IV. CIE shall be conducted in the 3rd semester and prescribed credits earned for the internship shall be entered into the grade card of the IV semester.

Exit 2: The exit option is given to the student at the end of year 2 (after the 4th semester). The student has to complete all academic requirements to complete the two years of the undergraduate program and earned requisite credits of 1st 2nd 3rd and 4th semesters and recommendation of the counselling team of the Institute

#### 210B11.3

Entry 3. This option is open to those who have left after completion of the  $2^{nd}$  year of the program and want to join back for the continuation of their study subject to the condition of a maximum duration of 8/6 years from the date of  $1^{st}$  admission.

A program of study leading to the Bachelor's degree is open to those who have met the entrance requirements, including specified levels of attainment. Admission to a program of study is based on the evaluation of documentary evidence (including the academic record) of the applicant's

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		ability to undertake and complete a Bachelor's degree program.							
		Students opting for multiple entries at the 5th-semester level have to undergo mandatory Summer Internship-II (21INT69) of 04 weeks cluring the intervening period of semesters V and VI. CIE shall be conducted in the 5th semester and prescribed credits earned for the internship shall be entered into the grade card of VI semesters.  Exit 3. (after 6th semester) On successful completion of three years, the relevant degree shall be awarded. The student has to complete all academic requirements to complete the three years of the undergraduate program and earned requisite credits of 1st to 6th semester and recommendation of the counselling team of the Institute.							
	210811.4	Counselling Team:  The students who choose to drop out (exit) undergo counselling to understand why they are making such decisions. The exit option is given to students only after the recommendation of the counselling team constituted by the Principal of the Institute.							
210B12.0	Grading								
	210B12.1	The University adopts an absolute grading system wherein the marks are converted to grades, and every examination result shall be declared in terms of Semester Grade Point Average (SGPA) considering all the courses that appeared in that Semester End Examinations including backlog course/s or arrear papers (refers to courses other than the current semester courses that have not yet been completed) and Cumulative Grade Point Average (CGPA). The CGPA will be calculated for up to an academic session semester, except for the first semester.							



	210B12.2	and the assigned range of mark								
		under the absolute grading system shall be as given below:								
		Letter Grade and corresponding Grade Points on a typical 10 - Point Scale								
		Letter	0	A+	Α	B+	В	С	P	F
		Grade	Outstanding	Excellent	Very Good	Good	Above Average	Average	Pass	Pall
		Grade Point	10	9	8	7	6	5	4	0
		% of Marks secured	90-100	80-89	70-79	60-69	55-59	50-54	40-49	0-39
		eligible to appear for SEE due to non-comply of any of the course/s then letter grade assigned against that course/s shall be NE.  In the case of all the courses of the program, the maximum CIE marks shall be 50 and the maximum SEE marks shall be 50. The minimum CIE marks secured shall be 40% of maximum marks, i.e. 20 out of 50 marks for passing. The minimum SEE marks to be secured shall be 35% of the maximum marks i.e., 18 out of 50 marks for passing. In total, the student has to secure 40% of the course maximum marks i.e., the sum of the CIE and SEE marks prescribed								
		for the Course.								
	210B12.3	A student obtaining Grade F in a Course/s shall be considered to fail								
		in that course/s and is required to reappear for the corresponding								
		course/s in the subsequent SEE. Whatever the letter grade secured by the student in his /her reappearance shall be awarded. The number								
		of attemp	ots taken	to clear	course	es/s sha	ll be ind	licated i	n the g	grade
10B13.0										
	210B13.1	Computation of SGPA and CGPA								
	210010.1	computat	ion of SGP	A and Co	GPA					

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	120-120-140	Point Avorage (SCDA)					
		Point Average (SGPA) and Cumulative Grade Point Average (CGPA					
		respectively:					
		$= \frac{\sum [CourseCredits \times GradePoints] for all the Courses applied in that semester}{}$					
		$\sum$ [CourseCredits] for all the Courses applied in that semester					
		$ \begin{aligned} & \sum [CourseCredits \times GradePoints] \ for \ all \ Courses \ excluding \\ & \textbf{CGPA} = \frac{those \ with \ Fgrades \ until \ that \ semester}{\sum [CourseCredits] for \ all \ Courses \ excluding \\ & those \ with \ Fgrades \ until \ that \ semester} \end{aligned} $					
		The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the					
1		grade cards.SGPA and CGPA calculation: An illustrative example for one academic					
		year is shown in Annexure-III.					
	210B13.2	Conversions of CGPA into Percentage of marks and Class Equivalence					
		There is no formula for the conversion of CGPA into the percentage of					
		marks. However, the following formula for conversion of the CGPA on a 10-					
		point scale into the percentage of marks (M) for employment / higher					
		studies, etc may be used;					
		Percentage of marks secured, M = CGPA Earned x 10					
		Illustration for a CGPA of 8.20;					
		Percentage of marks secured M = 8.20× 10					
		= 82.0 %					
	210B13.3	Class Equivalence:					
		Subsequent to the conversion of final CGPA, after successful completion of					
		the Program, into the percentage of marks (M), a graduating student is					
		reckoned to have passed in					
		(i). First Class with Distinction (FCD) if M≥ 70					
		(ii). First Class (FC) if 60% ≤M<70 %					
		(iii). Second Class (SC) if $50\% \le M < 60\%$					
		(iv). Pass Class (P) if 40%≤ M ≤ 50%					
210B14.0							
	210B14.1	All the below clauses are subject to a maximum duration of eight (for					
		Regular Students) / six years (for Lateral Entry Students) as applicable.					
		1) In case of students admitted to the first year:					
	e e	1					



- (a) Students have to fulfill the attendance and CIE requirement to appear for SEE of course/s of 1st year (refer to clause no. 210B5.4)
- (b) Students having not more than four F grades in the 1st and 2nd semesters of the first year of the program shall be eligible to prove to the 3rd semester (2nd year) of the program. These courses include courses marked as NE as per clause no. 210B12.2 and 210B10.1i
- (c) The students who fail to satisfy CIE and attendance requirement has to repeat the courses whenever offered next and become eligible for the 2<sup>nd</sup> year. (refer to clause no. 210B9.9 and 210B5.1)
- 2) Obtaining CIE: From the (3rd semester) second year onwards the student who obtains the required attendance for the course, but not the required CIE marks is allowed to move forward to the next semester. However, the student has to mandatorily obtain the required CIE in the subsequent semester. 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.(refer to clause no.210B9.9)
- 3) Carryover of backlog courses: From 3<sup>rd</sup> semester onwards the student/s who obtains required attendance, CIE, and appears for university examinations but fails (F Grade) to pass a course/s is allowed to move forward to the next semester (odd /even) irrespective of a number of F grades. However, for the award of degree, the student has to pass in all courses as per applicable scheme and regulations and earn the prescribed credits. This is subject to a permitted maximum duration. It may also be noted that the student will be given admission to the IV year (7th semester/8th semester) provided he/she passes all courses of 1st and 2nd semesters.
- 4) From the second year onwards there shall be no restriction from promotion from an even to next odd semester (or odd to next even semester) even if the student has not satisfied the attendance requirement in one or more courses (including bridge courses for lateral entry students) shall not be eligible to appear for the Semester

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End Examination (SEE) of that course(s). The student shall be required to repeat that course whenever offered next.

Permitted Maximum credits for registration: The student shall be permitted to register for total courses not exceeding 28 credits. These 28 credits include the courses of the regular semester and backlogs. The registration of these additional credits includes the courses having a shortage of attendance and the courses whose CIE requirements are not fulfilled. A student has to pay the prescribed fee as notified by the University from time to time.

#### 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 may choose a course of his / her choice with the same number of credits from the pool of courses suggested by the concerned Board of Studies. The course so selected should not have been studied by the student or to be studied in higher semester/s. The faculty advisor shall guide/advise the student in this regard. The college has to make arrangements for the registration and conduction of CIE for the selected course.
- b) This prevision is given only for two courses (one at a time) during the entire maximum duration of a course.
- 7) This provision is **optional**; the student/s can continue appearing for SEE with the same course without opting for a change of course as mentioned in clause 210B14.1-6a.

#### Readmission:

- a) Students who are temporarily discontinuing the program and getting readmitted or rejoin to the eligible semester are subject to a maximum duration of eight (for Regular students) / six (for lateral Entry students) 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 shall not claim any benefits based on the readmission.



	c) Students who take re-admission to any semester of the existing schem 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 of 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 at the time of admission to the program. The maximum duration of the Program shall be counted with reference to the USN (University Seat Number) allotted during admission to the program.  e) A student who has not obtained the eligibility for III semester even after three academic years from the date of admission to I semester shall discontinue the Programme or get readmitted to I semester of first year B.E./B.Tech., with a new University Seat Number (USN) but retaining the same year of admission. ( to be read along with 210B14.1-1)  8) Permitted Maximum credits for registration:  The student shall be permitted to register for total courses not exceeding 28 credits. These 28 credits include the courses of the regular semester and backlogs. The registration of these additional credits includes the courses having a shortage of attendance and the courses whose CIE requirements are not fulfilled. A student has to pay the prescribed fee as notified by the University from time to time.
210B14.2	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



		deg than 2) In contract the canomak press 3) In contract the canomak press 3)	stituent/affiliated college of VTU, shall be elemented at that stage in the credits decided by the University in the case, the forecasted or estimated credits are of the credits prescribed by the University of semesters of the program under the product of the credits which are equal to or great coursed credits.  The credits which are equal to or great coursed credits.  The credits which are equal to or great course of any difficulty, Vice-Chancellor shall so, which shall be final.	are equal to or greater individual cases. going to be less than on the completion of all revailing scheme, the not studied earlier and ter than the university				
210B15.0	Award of Degree							
	210B15.1	(a) St B. st se ha m. (b) Fo ap	ech. degree  udents shall be declared to have completed Tech. degree and is eligible for the award or udents have undergone the stipulated Cou mesters under the Scheme of Teaching ar we earned the prescribed number of credits waximum duration.  The award of degree, completion of bridge plicable is compulsory.  Andatory Earning of Activity points:	f degree provided the arse work of all the and Examinations and within the permitted				
		Sl. No.	Students Category	Activity points				
		1	Regular students admitted to the 4 years Degree program	prescribed by AICTE 100				
		2	Students entering 4 years Degree programs through lateral entry	75				
-		3	Students transferred from other Universities to the fifth semester	50				

The Activity Points earned shall be reflected on the student's eighth semester Grade Card.

(i) AICTE 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 are listed in Annexure -VII
B.E./B.Tech. (Honors) Degree
<ul> <li>(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.</li> <li>(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 admitted students as per 210B15.1</li> <li>(a.2) has earned additional 18 or more credits through University-approved online Courses.</li> <li>(a.3) satisfied the Regulations Governing the Award of Honors at B.E./B.Tech. Degree Programs - Guidelines - Annexure-V</li> </ul>
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.
• (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 student and 120 for III semester admitted student  • (a.2) Has earned additional 18 arms are like the second additional 18 arms are like the seco
• (a.2)Has earned additional 18 or more credits through a University-

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	approved courses list submitted by the board of studies.						
	Guidelines refer to Annexure-VI						
210B15.4	Award of Degree for an Extraordinary Student:						
	The University through college can offer a fast-track degree for						
	extraordinary student. The same is done by offering courses of his / he						
	choice to fulfill the requirement of the program in three and half year						
	However, the degree shall be awarded on completion of 04 years. However						
	the course completion letter may be issued jointly by University an						
	Institute immediately after completion of the program, notwithstanding th						
	minimum duration.						
	Aspirant students have to register with University through the Principal of						
	the college at the 5th-semester level, with the prescribed registration fee a						
	fixed by the University from time to time. A special provision to registering						
	for more credits other than regular semester credits shall be made only						
	after registration.  The extraordinary student is one with a CGPA $\geq 9$ in $2^{nd}$ , $3^{rd}$ , and						
	4th semesters and maintains the same in all the semesters. Otherwise,						
	his/her registration will stand canceled automatically.						
210B15.5	(1) Noncompliance of CGPA ≥5.00 at the end of the Program						
	1						
	(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.						
	(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.						
	(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						

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- of the degree. If CGPA <5.00, the students shall follow the procecture 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).
- (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.

### (2) Noncompliance of Mini-project

The mini-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 mini-project shall be declared fail in that course and shall have to complete the same during subsequent University examinations after satisfying the Mini-project requirements.

### (3) Noncompliance of Major-project

The Project Work shall be considered as a head of passing and shall be

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		considered for the award of degree. Those, who do not take up/comple
		the Major-project shall be declared fail in that course and shall have
		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 internshi
		as per 210B 6.1. The internship shall be considered as a head of passing an
		shall be considered for the award of degree. Those, who do not tak
		up/complete the internship shall be declared fail in that Course and shall
		have to complete the same during subsequent University examinations after
		satisfying the internship requirements.
10B16.0	Award of	Prizes, Medals, and Ranks
	210B16.1	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
		University for such awards.
	210B16.2	(1) For the award of rank in a Specialization of Bachelor of Engineering/
		Technology, the CGPA secured by the students from III to VIII semesters
		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
		(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
		degree of Bachelor of Engineering/ Technology, provided that the student,
		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
		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.
		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
		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
		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.
		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.  b) Is not a repeater in any semester because of rejection of result of a
		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.
		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.  b) Is not a repeater in any semester because of rejection of result of a semester/ shortage of attendance /temporarily discontinued and



		<ul><li>autonomous college.</li><li>e) Has not been transferred from any autonomous institution affillated</li></ul>		
		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 an award of ranks in 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.		
		<ul> <li>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.</li> <li>c) In case of a fractional number of ranks, it is rounded to a higher</li> </ul>		
		integer only when the first decimal place is greater than or equal to 5.		
	210B16.3	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.		
210817.0	Change of College: Transfer of students: The Regulations Governing the Change of College shall be followed (Annexure-IX).			
210B18.0	Change of Branch: The Regulations Governing the Change of Branch shall be followed (Annexure-X)			
210B19.0		y and Power to Modify		

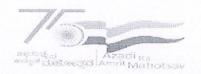
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210B19.1	The regulations governing the degree of Bachelor of
	Engineering/Technology of Visvesvaraya Technological University shall be
	binding on all concerned.
210B19.2	i) Notwithstanding anything contained in the foregoing, the University shall
	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.









### ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

ವಿಟಿಯುಅಧಿನಿಯಮ೧೯೯೪" ರಅಡಿಯಲ್ಲಿಕರ್ನಾಟಕಸರ್ಕಾರದಿಂದಸ್ಥಾಪಿತವಾದರಾಜ್ಯವಿಶ್ವವಿದ್ಯಾಲಯ

### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

State University of Government of Karnataka Established as per the VTU Act, 1994"JnanaSangama" Belagavi-590018, Karnataka, India

Prof. B. E. Rangaswamy, Ph.D

REGISTRAR

REF: VTU/BGM/Aca/BoS/2023/ 611

Phone: (0831) 2498100

Fax: (0831) 2405467 DATE 2 MAY 2023

### **NOTIFICATION**

Subject:

Regulations Governing the award of B.E./B.Tech., (2022

scheme) regarding...

Reference: JBOS 10.02.2023 and 171st EC meeting Proceeding no. 2.2.1

dated: 23.02.2023

Pursuant to the aforesaid Executive Council Proceedings the Regulations Governing the award of a degree in Bachelor of Engineering /Technology under Outcome-based education and choice-based credit system (2022) are hereby notified.

These regulations are applicable to students

- who are admitted to the 1st semester (1st year) of the B.E./B.Tech., programs from the academic year 2022-23 and onward.
- who are admitted to 3rd semester(2nd year) through lateral entry in the academic year 2023-24 and onward

The previous regulations in this regard are treated as null and void.

All the Principals of the Engineering Colleges are hereby informed to bring the content of this Notification to the notice of the all concerned

Sd/-

Registrar

To,

- 1. All the Principals of Engineering Colleges under the ambit of the VTU Belagavi
- The Chairperson and Program Coordinator, PG Centres' VTU Belagavi where B.E./B.Tech., programs are being offered.

Copy to

- 1. To the Hon'ble Vice-Chancellor through the secretary to VC for information
- 2. The Registrar (Evaluation) for information and needful
- 3. The Director (I/c) ITI SMU VTU Belagavi for information and make arrangements to upload it on the VTU web portal.
- 4. The Special Officer QPDS Examination section VTU Belagavi
- 5. The Coordinator IQAC VTU Belagavi
- 6. Office Copy

REGISTRAR



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# (Award of Bachelor of Engineering/Technology Degree) Regulations, 2022

#### REGULATIONS

#### PREAMBLE:

The quality of Technical Education depends on many factors but largely on- outcome based socially and industrially relevant curriculum, good quality motivated faculty, teaching learning process, effective industry internship and evaluation of students based on desired outcomes. To regulate, in an orderly manner, the process of admission, registration of students, conduct of classes, teaching –learning, Assessment, Evaluation and Grading processes to award Bachelor of Engineering/ Technology degree in Visvesvaraya Technological University, Belagavi and the Colleges affiliated to it, with due consideration to the NEP-2020 policy, and applicable Regulations of UGC and AICTE, in exercise of the powers conferred under Section 22 of UGC Act 1956 and under Sections [7(2) and 8(1,2, & 4] of the VTU Act 1994, the University hereby makes the following Regulations, namely:-

# 1. SHORT TITLE, APPLICATION AND COMMENCEMENT:

- 1.1. These Regulations may be called the Visvesvaraya Technological University [Award of Bachelor of Engineering/ Technology Degree] Regulations, 2022.
- 1.2. These Regulations shall apply to all the B.E./ B.Tech. Programmes conducted at the Visvesvaraya Technological University, its constituent Colleges and all other Colleges affiliated to it.
- 1.3. They shall come into force with effect from the date of their notification by the Visvesvaraya Technological University, Belagavi.
- 1.4. These Regulations shall be applicable to the batch of students admitted from the academic year 2022-23 and later and will be in force until revised or withdrawn by a notification.

# 2. **DEFINITION OF KEY WORDS:**

In these Regulations, unless the context otherwise requires:

- 2.1. Academic Bank of Credits (ABC): The Academic Bank of Credits (ABC), is a National-level facility that will promote the flexibility of the curriculum framework and interdisciplinary/multidisciplinary academic mobility of students across the Higher Educational Institutions in the country with an appropriate "credit transfer" mechanism.
- 2.2. **Academic Year:** Two consecutive semesters (odd followed by an even), including intervening periods constitute one Academic Year.

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# (Award of Bachelor of Engineering/Technology Degree) Regulations, 2022

- 2.3. **Act**: The Visvesvaraya Technological University Act 1994 including the amendments thereon.
- 2.4. **Choice-Based Credit System (CBCS):** The CBCS provides students with choices from the prescribed set of courses viz. Engineering Sciences, Professional core and electives, Professional and Open Electives, Non-Credit Mandatory Courses, Internships and Skill Courses. Under the CBCS, the requirement for awarding a degree or certificate is prescribed in terms of number of credits to be earned by the students.
- 2.5. **College:** An affiliated College or a constituent College of the University or the University Departments offering different programmes.
- 2.6. **Constituent College**: An Institution operating under the administrative, academic, and financial control of the University and declared as such under the Notification. It is an institution maintained by the University as such and includes an institution admitted to the privileges of the University as an affiliated College of the University in accordance with provisions of the Act.
- 2.7. **Course:** Usually referred to as 'subject'/ 'paper' and is a component of a Programme with defined learning objectives, course out comes and number of credits. The course credits vary depending on the required teaching-learning hours to accomplish the learning outcomes, specified in the course syllabus. 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 components etc., or a combination of some of these.
- 2.8. **Course Code:** An alpha numeric code used to uniquely identify a course in the programmes offered in the University. Three-digit number used as suffix with the Course Code for identifying the level of the course in the University. Digit at hundred's place signifies the semester in which course is offered and the tens place signifies type of course with unit place representing the sequence number in a semester in the Scheme of Teaching and Evaluation.
- 2.9. **Credit:** A unit or weightage by which the Coursework is measured. It represents the number of hours of instructions prescribed per week. One credit is equivalent to one hour of lecture or two hours of laboratory/practical Courses/ tutorials/ fieldwork etc., per week.





# (Award of Bachelor of Engineering/Technology Degree) Regulations, 2022

- 2.10. **Credit Point:** This is the product of grade point and the number of credits for a Course.
- 2.11. **Credit Representation:** Refers to the Credit Values for different academic activities considered, as per Table 1. Credits for the project phases, project vivavoce and internship shall be as specified in the Scheme of Teaching and Examinations.

Table 1: Credit Values						
Theory/Lectures (L) (hours/ week/ Sem)	Tutorials (T) (hours/week/Sem)	Laboratory/ Practical (P) (hours/ week/ Sem)	Credits (L:T:P)	Total Credits		
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	0	2	0:0:1	1		

- 2.12. **Choice-Based Credit System (CBCS):** The education model refers to customizing the Coursework, Core, Professional Elective, Open Electives, Skill-based ability Enhancement Courses, Non-Credit Mandatory Courses, and Internships to provide the necessary support for the students to achieve their goals.
- 2.13. Continuous Internal Evaluation (CIE)(also known as Formative Assessment):

  Refers to the evaluation of student's performance in the course during the teaching-learning process. CIE shall be done by the faculty teaching course and evaluation components may include tests, assignments, group discussion, quizzes, course-specific projects, field surveys, seminars, etc., conducted during the semester tenure with a weightage for different activities as specified by the University.
- 2.14. Course Evaluation: This represents the measurement of the impact of the

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teaching-learning process and offers an opportunity for improving the quality of learning in courses and teaching performance. Courses evaluation is done by adopting different methods such as tests, quizzes, assignments, etc., during the teaching-learning period at the end of some modules or chapters of syllabus contents and at the end of the semester. While the former part of the evaluation is called the Continuous Internal Evaluation (CIE) and the latter part of the evaluation is called Semester End Evaluation (SEE).

- 2.15. Course Registration: It is a formal registration to Courses of study every semester by every student under the supervision of a Mentor(also called Faculty Advisor, Counselors) in the college to maintain proper records. Registration on the University portal is mandatory.
- 2.16. **Cumulative Grade Point Average (CGPA):** This is a measure of the cumulative performance of a student of all semesters and is computed from the 2<sup>nd</sup>semester onwards. It is a measure of the overall cumulative academic performance of a student over the entire span of the academic program. CGPA is not an arithmetic mean a but weighted mean. It is also a number that lies between 0 and 10.
- 2.17. **Dean:** Dean of the Faculty of Engineering.
- 2.18. **First Attempt:** A student who has studied in a semester and attended any one of the University examinations of that semester after satisfying attendance and CIE requirements of all the prescribed courses of that semester and has registered for SEE. Such an attempt shall be considered the first attempt. Even if the student is absent for all the semester exams after registering for SEE, such an attempt shall also be considered the first attempt.
- 2.19. **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 shall have the Program details (Course code, title, number of credits, grades secured, along with the SGPA of that semester and CGPA (except for the first semester) earned till that semester.
- 2.20. **Grade Point (GP):** Refers to a numerical weightage allotted to each letter grade on a 10-pointscale against a range of percentage of marks secured by students in a course.





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- 2.21. **Institution:** An institution of higher education engaged in teaching and research at the undergraduate, post-graduate or higher levels.
- 2.22. **Letter Grade:** Course Letter Grade (or simply letter grade or grade) is an index of performance of a student in a said course and refers to a qualitative measure of achievement of a student in each course, based on the percentage range of marks secured in CIE and SEE put together or CIE alone. Grades are denoted by letters O, A+, A, B+, B, C, P and F. The rubrics attached to letter grades are as follows: **O**: Outstanding, **A+**: Excellent, **A**: Very Good, **B+**: Good, **B**: Above Average, **C**: Average, **P**: Pass and **F**: Fail. Additional letter grades used under special circumstances are, **DX**: Attendance below 75%, **AU**: Satisfactory in an Audit course, **AB**: Absent for the Course, **PP**: Passed in Non-credit course, **NP**: Not Passed in Non-credit course, **W**: Dropped/ withdrawn.
- 2.23. Non-Credit Mandatory Courses (NMC): In the case of non-credit mandatory courses, students shall attend the classes during the respective semesters to satisfy the attendance requirements as well as CIE requirements. 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 not completed the course. 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 a degree.
- 2.24. **Major Degree:** A Major degree will be awarded along with "Honours" distinction if a student completes the specified additional number of credits during the regular programme as per the Regulations governing Honours Degree Programme. A student admitted to the Programme shall be eligible to register to "Honours" programme if he/she fulfils the conditions as per the Regulations.
- 2.25. **Mentor:** A Faculty Advisor allotted by the principal to guide about 15-20 students about their registration to the courses and progression in the Programme .
- 2.26. **Notification:** A notification issued by the concerned Statutory Officer of the University.
- 2.27. **Minor Degree:** A Degree along with Minors is awarded in a programme if a student completes the required number of credits of another programme as per the

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- Regulations governing Minor Degree Programme. A student shall be eligible to register to a Minor programme if he/she fulfills the conditions as per the Regulations
- 2.28. **Multiple Entry and Multiple Exit (MEME):** The multiple entries and exit points in the academic programmes would remove rigid boundaries and create new possibilities for students. To facilitate flexible learning within the stipulated period (eight years for regular students and 06 years for lateral entry students), multiple-entry and multiple-exit options are offered to needy students.
- 2.29. **Passing Standards:** Refers to passing a course only when GP is greater than or equal to 04.
- 2.30. **Principal:** The Head of the College or a Higher Educational Institution (HEI). In the case of programmes offered at University campuses, it shall be the Head/ Chairperson of the Department offering the programme.
- 2.31. **Programme:** A planned series of events/activities comprising of a combination of courses leading to the award of degree.
- 2.32. **Semester:** One of the two sessions of an Academic Year, 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.
- 2.33. Semester End Examinations (SEE) (also called Summative Assessment): Also called summative assessment, which refers to the examinations conducted by the University covering the entire course syllabus. For this purpose, syllabi shall be modularized, and SEE questions shall be set from each module as specified by the University.
- 2.34. **Semester Grade Point Average (SGPA):**It is a measure of academic performance of a student in a semester. It is the weighted average or weighted mean of the grade points obtained by a student in the various courses of any semester. It results in a number that lies between 0 and 10. It shall be expressed up to two decimal places.
- 2.35. **Teacher:** A member of the regular faculty at the levels of Professor, or Associate Professor or Assistant Professor, and includes adjunct faculty and faculty on a long-term contract of not less than three years.





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- 2.36. **Transcript, Grade Certificate and Grade Card:** Grade card shall be issued to candidates indicating the programme details (Course code, title, number of credits, grade secured and grade points) for all the registered courses after every semester. On successful completion of all courses/earning credits, specified in a semester, the grade certificate is issued indicating the programme details along with SGPA of that semester and CGPA earned till that semester. Transcripts to the successful candidates shall be issued after completion of the programme.
- 2.37. **University:** Visvesvaraya Technological University (VTU), Belagavi, established under the Karnataka State Act as defined in the University Grants Commission Act, 1956.

#### REGULATIONS

## 220B 1.0. TITLE AND DURATION OF THE PROGRAMME

- **220B 1.1:** The Programme of study, which is an undergraduate Programme, shall be called the degree of Bachelor of Engineering/Bachelor of Technology, abbreviated as B.E./B.Tech., followed by specialization indicated within brackets.
- **220B 1.2:** The duration of the Programme for B.E./ B.Tech. degree shall be four academic years, organized in eight semesters, with each semester having duration of 16-18 weeks, having provision for Multiple-Entry-Multiple-Exit and award of Honours degree or Minor degrees.
- 220B 1.3: The annual academic calendar of events in respect of the Programme of study approved by the Academic Council, shall be notified at least a month before the commencement of each academic year. It is mandatory for students/ faculty members to strictly adhere to the Academic Calendar for completion of academic activities. Academic Calendar shall be displayed on the Academic Office homepage of the University website.

## 220B 2.0. ACADEMIC ELIGIBILITY FOR ADMISSION

The rules specified in the following clauses shall be followed for admission to B.E./ B.Tech. Programmes, but the orders issued from the Government/the regulatory bodies from time to time shall prevail.

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- 220B 2.1. Admission to 1st year: Eligibility for candidates Passed in second PUC or equivalent,
  - 1) As notified by the Government of Karnataka from time to time.
  - 2) 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 I year B.E./B.Tech. Degree Programme from the University.
- **220B 2.2. Admission to 2<sup>nd</sup> year (Lateral Entry):** Eligibility for candidates who have passed a 3-year Diploma in Engineering and B.Sc. Degree shall be,
  - 1) As notified by the Government of Karnataka and the University from time to time for admission in to 3<sup>rd</sup> semester of B.E./B.Tech. degree programme.
  - 2) Those candidates who have completed an Engineering Diploma from States other than Karnataka shall submit the Equivalence/ Eligibility Certificate issued by the Director of Technical Education, Karnataka.

# 220B 2.3. Qualification earned from foreign Countries:

With regard to the qualification earned from foreign countries, an equivalence certificate from the Association of Indian Universities/University is mandatory for admission to B.E./B.Tech. Programmes. In case of any dispute about the equivalence in qualification earned from foreign countries, the decision of the University in this regard shall be final and binding on all concerned.

#### 220B 2.3.4 Additional Requirements:

- 1) All the Diploma and B.Sc. degree holders seeking admission to lateral entry, shall also pass any deficit courses as specified by the University before the completion of the degree.
- 2) Further, all the Diploma and B.Sc. degree holder applicants shall also be required to register and pass the non-credit mandatory Mathematics bridge course(s) specified by the University, within two year of joining the programme. However, applicants with B.Sc. degree (with Mathematics major) may apply to the Registrar through Principal/ Dean seeking exemption from the bridge course.

#### 220B 3.0. CURRICULUM FRAMEWORK AND ACADEMIC PROCESSES

#### 220B 3.1. Semesters - Odd and Even:

The University follows the Choice based credit system and the semester scheme.





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There are two regular semesters in an academic year. The semester that begins in August (August to December) is known as the Odd Semester and the semester that begins in January (January to May) is known as the Even Semester.

#### 220B 3.2. Curriculum:

Every Programme has a prescribed course structure which, in general terms, is known as the Curriculum or the Courses of Study or the Scheme of Teaching and Evaluation. It prescribes all the courses/laboratory/ other requirements for the degree and sets out the nominal sequence semester wise.

It provides the syllabus and a list of text/ reference books (or other learning material sources) for each course. The Courses of Study details are updated every semester and are made available at the University website: http://vtu.ac.in/BEBTECH/. Curriculum shall also include some Online Courses including SWAYAM and other MOOC courses, approved by the University. However, selection of such courses, if any, shall always be within prescribed guidelines of the relevant regulatory bodies and the University.

# 220B 3.2.1. Choice Based Credit System (CBCS):

- 1) A certain quantum of academic work, measured in terms of credits, is laid down as the requirement for completion of B.E/B.Tech. degree in the different available specialization areas. A student earns credits by satisfactorily completing courses/other academic activities every semester.
- 2) The credits are distributed semester wise, as prescribed in the Scheme of Teaching and Evaluation for each of the programmes. The courses generally progress in sequences, building competencies as per the course learning outcomes. The positioning of a course indicates certain academic maturity on the part of the students.
- 3) Some courses do, in addition, may specify a grade/pass/exposure for other courses, offered earlier in the programme, as pre-requisites for the course.
- 4) Since the University follows the CBCS, the students shall be offered courses as per the Scheme of Teaching and Evaluation, and the students are required to register for the courses of their choice before the beginning of every semester.
- 5) Students are required to follow the semester wise schedule of courses specified

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in Scheme of Teaching and Evaluation; they do, however, have freedom to follow alternative schedules to optimize their academic profile with additional courses, keeping the requirements for each course in mind. For students with backlog courses, such rescheduling may even become necessary. Such departures from suggested schedules need to be done very carefully, and always with guidance from the Mentor.

# 220B 3.2.2. Types of Courses:

There will be following types of courses in a B.E./B. Tech. programme, namely:

- 1) Humanities and Social Sciences (HS), including Management, Skill enhancement and Economics.
- 2) Basic Sciences (BS) including Mathematics, Physics, Biology and Chemistry.
- 3) Engineering Sciences (ES) including Workshop, Drawing, Basics of Electrical/Civil/ Mechanical/ Computer Engineering, Materials, and Instrumentation.
- 4) Professional Core Courses (PC): These are the courses to be compulsorily studied by a student as a core requirement to complete the requirements of a programme in a said discipline of study.
- 5) Professional Elective Courses (PE): These are the courses from which a student can choose and study as part of the requirement to complete the programme in a said discipline of study.
- 6) Open Elective Courses (OE): These courses are supportive to the discipline/ providing extended scope/enabling an exposure to some other discipline/ domain and they are chosen from the pool of courses.
- 7) Skill development Courses (SD): These courses will be nurturing student proficiency skills. These courses are offered to achieve the programme outcomes not specifically covered by the other courses.
- 8) Ability Enhancement Courses (AE):These are the generic skill courses which are basic and needed to all to ensure progression across all careers.
- 9) Non-Credit Mandatory Courses (NM): These are courses on peripheral subjects in a programme, wherein familiarity is considered mandatory.
- 10) Project work (PW), Mini Project work (MP), and Internship (IS) are also considered as courses in the programme.





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#### 220B 3.2.3. Offering Courses

The above types of courses in a B.E./B. Tech. programme are offered as follows:

- 1) Humanities and Social Sciences (HS) courses will have 1 to 3 credits per course.
- 2) Basic Sciences (BS) courses will have 2 to 4 credits per course.
- 3) Engineering Sciences (ES) courses are common across all disciplines and will have 2 to 4 credits per course.
- 4) Professional Core Courses (PC) will have 2 to 4 credits per course.
- 5) Professional Elective Courses (PE) will have 2 to 4 credits per course.
- 6) Open Elective Courses (OE) may have 2 to 4 credits per course.
- 7) Skill development Courses (SD) and may have 1 to 3 credits per course.
- 8) Ability Enhancement Courses (AE)may have 1 to 2 credits per course
- 9) Non-Credit Mandatory Courses (NM) require only a pass in each of the specified courses to qualify for the award of the Degree.
- 10) Project work (PW), Mini Project work (MP) and Internship (IS) are offered which may have 10, 3, and 6 credits respectively.

The courses in the above types may be a combination of Lectures, Tutorials and Practical in any combination with suitable credits assigned to them. All the courses registered by a student under any of the above types of courses as required for award of the degree shall be considered as heads of passing which shall be Graded according to his/her performance. However, the Non-Credit Mandatory Courses shall be passed by a student for which Grades are not assigned.

The following procedure shall be used for designing and offering the above courses:

The courses for a programme under the following types from (a) to (l) shall be designed within the framework of UGC and AICTE guidelines by the concerned Board of Studies and approved by the Academic Senate of the University. The number of courses offered in a programme under each of the above types shall be decided as per the curriculum framework specified under clause 220B 3.4.

The list of different types of theory courses and details of the practical courses used in the programmes are given below respectively from (a) to (i) and (j) to (l).

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- (a) Humanities and Social Sciences
- (b) Basic Sciences
- (c) Engineering Sciences
- (d) Professional Core Courses
- (e) Professional Elective Courses
- (f) Open Elective Courses
- (g) Skill development Courses
- (h) Ability Enhancement Courses
- (i) Non-Credit Mandatory Courses

#### (j) Project work:

Based on the ability/abilities of the student/s and recommendations of the mentor, a disciplinary or an inter-disciplinary 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 may be published/patented.

#### (k) Mini Project work:

A Mini Project is a laboratory/ societal/ Industry-oriented work that will provide a platform for students to enhance their practical knowledge and skills through the development of small systems/ applications based on the ability/abilities of the student/s and recommendations of the mentor, a disciplinary or aninter-disciplinary mini-project can be assigned to a group having not more than 4 students.

#### (l) Internship:

The internship is an extended period of work experience undertaken by the students aspiring to supplement their degree with professional development. The students are allowed to prepare themselves for the workplace and develop practical skills. The Internship shall be completed during the period specified in the Scheme of Teaching and Evaluation.

The institution shall encourage students to take up,

- (i) an interdisciplinary Research Internship or Industry internship and
- (ii) a rural internship, a work-based activity carried out to learn practical experiences in rural areas, for the upliftment of living standards.

With the consent of the internal guide and Principal of the Institution,





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students shall be allowed to carry out the internship in their home town (within or outside the state or abroad), provided favorable facilities are available for the internship and the student remains regularly in contact with the internal guide.

University shall not bear any cost involved in carrying out the internship by students. However, students can receive any financial assistance extended by the College.

#### 220B 3.2.4. Audit Courses:

A student desirous of additional exposure to a course, without the rigors of obtaining a good grade, 'audits' a course. The minimum requirement of attendance for an 'Audit Course' is 75%, with any additional requirements as set by the instructor such as submission of assignments and minimum performance in some of the in-semester evaluations. Auditing of courses during regular semesters from 3<sup>rd</sup> semester onwards is permitted under the following conditions:

- 1) Students with CGPA>6.0 will be permitted to 'Audit' a course. A course can be audited provided the course is offered in the semester as a credit course for others, and there is no slot clash. Prior permission of the Instructor is required.
- 2) Audit courses would be restricted to a maximum of two (2) courses per student in the entire period of the programme.
- 3) The Course Teacher would award the 'AU' grade, if the attendance is satisfactory and additional requirements, as set out by the Course Teacher, are met. If the attendance and performance in additional requirements is not satisfactory, the Course Teacher will award 'No Grade'. The grade 'AU' does not carry any grade points and therefore does not figure in SGPA/ CGPA calculations.
- 4) The course successfully completed in Audit mode will be reflected in the Semester Grade card and the Transcript as Audit Course.

#### 220B 3.3. Prescribed Number of Credits for the Programme

All courses prescribed by the University, except the Non-credit Mandatory courses,

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shall have credits and be considered as a head of passing for vertical progression. The credits fixed for the courses are awarded to the students on passing the courses registered by him.

- The total number of credits to be earned for the award of B.E./ B.Tech. degree by students admitted to the first semester of the four year B.E./B.Tech. programme shall be 160.
- 2) The total number of credits to be earned for the award of B.E./B.Tech. degree by students admitted under lateral entry scheme to the third semester of the four year B.E./B.Tech. programme shall be **120**.
- 3) A student shall be awarded B.E./B.Tech. degree with **Honours or Minor**, if he/she earns a minimum of **additional 18 credits**, satisfying the conditions specified in "VTU (Award of B.E./B.Tech. Honors/ Minors Degree) Regulations, 2022".

#### 220B 3.4. Curriculum Framework

The structure of UG programme in Engineering shall have essentially the following types of courses with the breakup of credits as shown against them:

	Table – 3.4 : Credit Breakup for a Programme				
Sl. No.	Category	Credits *	% of total Credits		
1	Humanities and Social Sciences including Management courses, including AE	16	10.00		
2	Basic Science courses	22	13.75		
3	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer/PL/ET etc.	24	15.00		
4	Professional Core courses relevant to chosen specialization/branch	59	36.88		
5	Professional Elective courses relevant to chosen specialization/branch	12	7.50		
6	Open subjects – Electives from other technical and /or emerging subjects	12	7.50		
7	Project workand internship in industry or elsewhere	15	9.37		
8	Mandatory Courses	(non-credit)	0.00		







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[Environmental Sciences, Induction Program, Indian		
Constitution, Essence of Indian Knowledge Tradition]		
Total	160	100.00

<sup>\*</sup>Minor variation is allowed as per need of the respective disciplines on approval of the University.

# 220B 3.5. Scheme of Teaching and Evaluation

1) The Scheme of Teaching and Evaluation shall be framed by distributing the total credits over eight semesters as follows:

Table – 3.5 : Semester-wise Allocation of Credits							
	Semester	Credits	Total Credits	<ul><li>Lecture(L): one hour/week: 1 credit</li><li>Tutorial(T): Two hours/week: 1 credit</li></ul>			
I year	1 2	20 20	40	Practical/ Lab/ Drawing (P): Two hours/			
II Year	3 4	20 20	40	week: 1 credit			
III Year	5	20 20	40	Project, Mini-project, Internship: credits as			
IV Year	7 8	20 20	40	<ul><li>recommended by the University.</li><li>Credit for the Seminars shall be part of the</li></ul>			
Total:		160		courses.			

# 2) Course Load:

Every student to register for a set of *Courses* in each *Semester*, with the total number of their *Credits* being limited by considering the permissible *weekly Contact Hours* (typically: 35 hours/Week); For this, an average *Course Load* of 18-24 *Credits/Semester* (e.g., 6-7 *Courses*) generally acceptable; to also include 2 or 3 *Units of Non-Credit Mandatory Courses* in some Semesters.

# 3) Teaching-Learning Process

The theory courses shall be designed to have the syllabus spanning over one semester depending on the credits allocated for them. That is, Four-credit theory courses shall

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be designed for 55-60 hours of Teaching-Learning process, Three-credit theory courses shall be designed for 40-45 hours of Teaching-Learning process, Two-credit theory courses shall be designed for 25-30 hours of Teaching-Learning process and One credit theory course shall be designed for 15 hours of Teaching-Learning process.

- 4) The Scheme of Teaching and Evaluation provides the list of courses offered in a semester, their types, course credits in L-T-P format and the contact hours. As per this, detailed syllabus content, hour distribution, Text and reference Books, Assessment and Evaluation procedure shall also be provided for all the semesters by the Board of Studies of the respective programmes. A course may include online references and virtual labs as approved by the University.
- 5) The composition of courses in the curriculum may be only a theory, a thory with practical or only a practical. These carry separate course codes and each are considered as separate "head of passing".
- 6) The Syllabus formulated shall be well structured and enable CBCS implementation, provide MEME options and incorporate Outcome Based Education (OBE) framework.
- 7) The University/Colleges shall provide necessary class rooms, Laborary equipments, Internet and computing laboratories, Library, qualified faculty and other supporting facilities to meet the standards as specified by the University and concerned Statutory bodies to create proper teaching-learning environment for the students.

#### 220B 3.6. Course Registration

1) It is mandatory for every student to register for the semester to attend various courses/ earn credits, using the prescribed Course Registration Form (CRF), till he completes his programme. The registration is normally done on the last two working days of each semester upon completion of the SEE. In all circumstances, registration shall be completed on or before the prescribed last date for registration announced in the Academic Calendar. The registration of courses in each semester with the University portal is mandatory.

# 2) Student Mentoring

On joining the University or a College, a group of students are assigned a Mentor from the concerned department offering the Programme. Students are advised to consult





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the Mentor on any matter relating to their academic performance and the courses they may register in various semesters. Mentor guides the students to complete their courses of study for the required degree in a smooth and satisfactory manner.

# 3) Minimum Number of Registrations for Offering a Course:

There is no restriction on minimum registrations in a professional core course. However, the minimum number of students registered to any Professional Elective Course/Open Elective Course/ Ability Enhancement Course (from 3<sup>rd</sup> semester onward) offered by the Departments shall not be less than ten. In such cases, if the number of registrants for the elective course is less than 10, 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 Professional Elective Course/Open Elective Course/ Ability Enhancement Course is to be offered in that college.

# 220B 3.6.1. Course Registration Procedure:

- 1) The procedure involves the following steps:
  - a) A student shall register for required courses each semester with prior permission of the Mentor.
  - b) The student can register for courses he intends to take during a given semester on the basis of his plan for each Programme, as given in the Scheme of Teaching and Evaluation and as per the advice of the Mentor.
  - c) The students shall decide on the courses to be registered during the ensuing semester immediately after their SEE examinations.
  - d) The Mentor is expected to discuss with the student his academic performance during the previous semesters and then decide the number and nature of the courses for which the student can register during the semester within the framework of the Regulations.
  - e) The Mentor may advise the student to drop one or more courses/activities based on his academic performance. The Mentor may even advise a reduced load program over several semesters for students with poor performance at the end of the first semester/year.
  - f) Every student is permitted to register for the courses to an extent subjected to

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the conditions under clause 220B 3.6.2.

- g) Students are not permitted to re-register for a course, which they have already passed.
- h) The student shall fill up the CRF online, stating the courses that they propose to complete during the ensuing semester as per the prescribed curriculum.
- i) They shall take a printout of the completed CRF, take signature of the Mentor and submit to the Dean/ Principal within the date notified by the University for registration.
- j) Students having outstanding dues to the University/ College, or a hostel may not be permitted to register.
- k) The registration is deemed to be complete only on approval by the University.
- l) Without registration, any academic activity (course/seminar etc.) undergone by a student will not be counted towards the requirements of his/her degree.
- m) A student shall exercise the option in respect of a higher semester Professional Elective Course/Open Elective Course/Ability Enhancement Course 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 preferably within 15 days from the date of commencement of the semester as per the academic calendar of the University

#### 220B 3.6.2. Permitted Maximum Credits for Registration:

The student shall be permitted to register in a semester for that number of courses with total credits not exceeding 28. These 28 credits, include Minor/ Honours degree courses, the courses of the regular semester and backlog courses. The registration of these additional credits also includes the courses with a shortage of attendance and the courses with unfulfilled CIE requirements. A student shall pay the prescribed registration fees as notified by the University from time to time.

#### 220B 3.6.3. Late Registration:

Registration beyond the last date may be permitted only in special cases till the date specified in the Academic Calendar, on payment of a late registration fee.





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## 220B 3.6.4. Registration for Non-credit Mandatory courses:

- 1) Formal registration for these courses shall also be done along with other courses, at the beginning of the semesters.
- 2) Non-credit requirements are assessed as Pass (PP)/ Not Pass (NP) subject to the fulfillment of the minimum requirements of the specified activities and a minimum of 75% attendance. The award of degree is subject to successful completion of these requirements.
- 3) A student will be awarded PP (Pass) grade for the course he is registered for, in that semester, provided the minimum requirement is met during that semester together with attendance criteria.
- 4) Not satisfying these requirements will result in a failure grade NP (Not Pass), and the student has to re-register for the course when offered next in the subsequent semesters and pass within two years. The grades shall be submitted to the University before the commencement of the SEE.

#### 220B 3.6.5. Course substitution:

A student obtaining 'F' grade four times in a course, other than the Professional core courses, is permitted to choose an equivalent course for substitution on approval by the University. The student shall re-register for the new course and complete the course requirements subjected to the conditions of clause 220B 5.2. A student shall not be permitted to avail this option beyond a maximum of two courses during the programme.

#### 220B 3.7. Attendance Requirement

1) Every prescribed course shall be considered as a unit for the calculation of attendance. The students are required to attend all the lectures, tutorials, practical, and other prescribed curricular and co-curricular activities, and earn full attendance. However, a student shall obtain a minimum attendance of 85% in each of the courses registered. However, if the attendance is below 85%, the shortage upto a maximum of 10% of the attendance may be condoned by the Vice Chancellor on the specific recommendations of the Dean/ Principal of the college where the candidate is studying. This provision shall be utilised based on medical grounds, participation in NSS/ NCC/ Red cross/ National level Republic Day and Independence Day Parade/ participation in University/

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State/National/ International level sports and cultural activities, seminars, workshops, paper presentation etc., of significant value, supported by valid documents. The Course Teacher may recommend for condoning the shortage of attendance and submit the application with documents through the Dean/Principal along with his recommendation to the office of the Registrar (Evaluation) before the last day of the semester.

- 2) 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.
- 3) In case of late admissions, approved by competent authority (KEA/DTE/VTU), for admission to I semester and III semesters (for lateral entry scheme), the attendance shall be reckoned from the date of admission to the Programme.
- 4) The Principal shall also notify every month, the list of candidates who are falling short of required attendance. The Course Teacher/ Mentor/Class Teacher or the College office shall inform the students as well as their parents/guardians about the attendance requirement and the attendance status every month. Students facing an attendance shortage shall be mentored to make up for the shortage.
- 5) A student who does not satisfy the attendance requirement in one or more courses (including bridge courses for lateral entry students, if any) shall not be permitted to appear for the Semester End Examinations of those courses. The grade card for such courses shall be marked as DX. The candidate shall repeat those courses whenever offered next. However, the student shall be allowed to appear for the SEE in other courses of the semester.

#### 220B 4.0. ASSESSMENT AND EVALUATION PROCEDURE

Formative, Summative and other Assessments shall be conducted as per the University calendar of events in all the courses of the programme offered to the students, within the framework of Scheme of Teaching and Evaluation approved by the University. The details of Assessment and Evaluation for specific theory and practical courses, including theory question paper setting patterns, as recommended by the Joint Board of Studies and approved by the University are included in Annexure-VI.





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#### 220B 4.1 Assessment and Evaluation Process:

- 1) CIE and SEE constitute the major evaluations prescribed for each course, with only those students maintaining a minimum standard in CIE are permitted to appear in the SEE of the course.
- 2) In such cases where a laboratory is attached to the course, CIE marks shall be awarded separately for both theory and the laboratory. However, the laboratory may or may not have the SEE component in the evaluation.
- 3) In such cases where a laboratory carries more credits and is not part of the theory, they are listed separately in the Scheme of Teaching and Evaluation. Hence, they are treated as separate "heads of passing" which are assessed and evaluated independently.
- 4) CIE and SEE to carry 50% weightage each, to enable the course to be evaluated for a total of 100 marks, irrespective of its credits.
- 5) The evaluation system of the programme is comprehensive and continuous during the entire period of the Semester, by the faculty who is teaching the course. For a course, the evaluation and grading will be on the following parameters:

Α	Continuous and Comprehensive Evaluation (CCE)	25 marks
В	Internal Assessment Tests (IAT)	25 marks
	Total of CIE (A+B)	50 marks
C	Semester End Examination (SEE)	50 marks
	Total of CIE and SEE (A + B + C)	100 marks

# 220B 4.2. Continuous Internal Evaluation (CIE)

- 1) For a theory course, with an L-T-P distribution of L-0-0, the CIE will carry a maximum of 50% weightage of the total marks of a course. Before the start of the Academic session of each semester, a faculty may choose for his course **Internal Assessment**Test and a minimum of two of the following assessment methods with suitable weightage for each.
  - i) Assignments (Individual and/or Group)
  - ii) Seminars
  - iii) Oral/Online Quizzes

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- iv) Group Discussions
- v) Case studies/Case lets
- vi) Practical orientation on Design Thinking, Creativity & Innovation
- vii) Participatory & Industry-integrated learning
- viii) Practical activities / problem solving exercises
- ix) Class presentations
- x) Analysis of Industry/Technical/Business Reports
- xi) Reports on Guest Lectures / Webinars / Industrial Visits
- xii) Industrial / Social / Rural projects
- xiii) Participation in Seminars/ Academic Events/Symposia, etc.
- xiv) Any other academic activity
- 2) The faculty will submit the 'CCE Assessment Plan' to the Principal/Dean/HOD for approval and notify the same along with the course syllabus before the start of semester. The total marks of the above two assessment components shall be scaled down to 25 marks/ 25% of total marks of the respective course (i.e., A).
- 3) To assess the students in a course under IAT component, two tests shall be conducted in a semester. Each test will be conducted for 25 marks. The average marks obtained in these two tests will be taken as IAT Marks (i.e., B).
- 4) The CIE marks awarded to students at different stages during the course shall be displayed on the notice board of the Department concerned to enable the students to point out any discrepancies.
- 5) The student shall obtain a minimum of 40% of marks allotted for CIE in each course (i.e., A+B) to be eligible to appear for the SEE in that course.
- 6) When a laboratory is part of a theory course, with L-T-P distribution of L-0-P, the student shall obtain a minimum of 40% marks in CIE of the laboratory to be eligible to appear for SEE in that course. This is in addition to the requirement specified under (5) above for the theory part of the course. The CIE marks obtained by a student in the laboratory, if it is equal to or greater than 40%, shall be retained until the end of that academic year till he passes the SEE. Otherwise, he shall re-register for the course when offered next.
- 7) If a student is unable to secure a minimum of 40% in CIE marks in any course, he shall  $CH^{NOL}QO$

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not be eligible to take up SEE/ viva-voce examination in that particular course. It shall be the responsibility of Principal/Dean to scrutinize the list of candidates and permit only the eligible students to take up SEE/ viva-voce. In the event of an ineligible student inadvertently being allowed to appear for the theory/viva voce examination, the result of the concerned student shall be withdrawn forthwith by the University.

- 8) The list of such students, who have not secured the minimum in CIE marks, shall be sent to the Registrar (Evaluation) along with the submission of CIE marks of the successful students.
- 9) After the submission of CIE marks to the Registrar (Evaluation) of the University, any request for changes in the marks by the Principal/Dean shall be considered only after due approval of the Vice-Chancellor obtained through the Registrar (Evaluation).
- 10) The students not obtaining 40% marks in CIE shall re-register for the course during the subsequent semester whenever it is offered.

#### 220B 4.3. Semester-End Examination:

- 1) Only those students who satisfy the attendance requirement as per 220B3.7 and CIE requirement as per 220B4.2 shall be eligible to appear for SEE of that course.
- 2) 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 f 50 marks to add the same with e CIE marks for the award of the letter grade.

#### Notes:

	Table A [Regulation 220B 4.1]	
	Total of CIE and SEE (A + B + C)	100 marks
С	Semester End Examination (SEE)	50 marks
	Total of CIE (A+B)	50 marks
В	Internal Assessment Tests (IAT)	25 marks
Α	Continuous and Comprehensive Evaluation (CCE)	25 marks

- 3) The Semester End Examination for all the courses offered during the semester shall be conducted at the end of each semester except when there are no students taking examinations for any course as per the Scheme of Teaching and Evaluation.
- 4) Only those students who satisfy the attendance requirement as per 220B 3.7 and CIE requirement as per 220B 4.2 shall be eligible to appear for SEE of that course.

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- 5) 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. (except for the project work the total SEE marks are 100)
- 6) The University examinations for all the Programmes of study shall be conducted at the end of each semester.
- 7) Students having no backlog courses, may not have more than one examination scheduled on the same day. However, students having backlog course may face a situation where they may have,
  - a) Two examinations scheduled at the same time of the day,
    - b) To take two examinations on the same day, one during the morning session and the other in the afternoon session, and
    - c) Examinations on consecutive days.

The students shall be prepared to appear for the examinations specified above under (b) and (c) cases. However, the University shall take utmost care to avoid scheduling as specified under(a) as far as possible. But in view of time constraint to complete the examinations and announce results on time, if it becomes unavoidable, the students shall choose to appear for the examination as per the advice of their Mentor. As changing the examination date is not an option, the examination time table shall not be modified/ altered/ adjusted in any of the above three cases.

- 8) The passing standards in CIE, SEE, a course and a semester for all types of the courses in which grades are awarded shall be as per the clause 220B 6.3.
- 9) A student securing an 'F' grade in any courses, shall reappear for that course during the subsequent SEE. The CIE marks awarded to the student at the first attempt in the concerned course shall be carried forward. Revised CIE marks are considered only for courses where grade DX was awarded.
- 10) For a pass ('P' grade), sum total of CIE and SEE marks must be 40% of the maximum marks prescribed for a course as per the Scheme of Teaching and Evaluation.





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#### 220B 4.4. Makeup Examination:

- 1) The makeup examination facility shall be available to those students who have appeared and failed in the SEE in one or more courses in a semester. However, the students passing in the makeup examination shall lose their eligibility to be considered for the award of Ranks.
- 2) If a student has satisfactory attendance in a course and has secured a minimum of 40% in CIE but could not appear in SEE for valid and convincing reasons as specified under 220B 3.7.1, shall be eligible to appear for the makeup examination, after due recommendation by the Principal/ Dean and approval from the University.
- 3) Following may be considered as other valid reasons for semester end makeup examination:
  - a) Serious Illness/ personal accident in the case of the student himself.
  - b) Serious illness/Accident/Death of parent/guardian.
- 4) Students claiming semester end makeup examination on the above reasons are required to apply to the Principal/ Dean, on or before the prescribed last date for registration for such makeup examination announced in the Academic Calendar, along with proper medical certificate issued by a competent Authority. In the event of death and/ or serious illness/ accident of parent or guardian, the application should be supported by adequate evidence of the same/ appropriate documents. Decision of the Vice Chancellor is final in these matters.
- 5) The Makeup Examinations for both the semesters shall be conducted once in a year at the end of the even semester.

## 220B 4.5. Maintenance of Examination Records

- 1) 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 3 years after the announcement of University results and shall be made available for verification as per the direction of the Registrar (Evaluation).
- 2) Any corrections or overwriting of CIE marks on the blue book/drawing sheet laboratory record etc., where CIE marks are awarded, shall bear the signature(s) of the concerned Teacher(s) and the Head of the Department.

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- 3) CIE marks shall reach the University before the commencement of examinations as per the notification from the office of the Registrar(Evaluation) from time to time. After submission of CIE marks to the University, any request under any circumstances for a change of CIE marks shall not be considered.
- 4) CIE marks of those students, who come under 220B 4.6(4) and (5), shall also be sent to the Registrar (Evaluation) along with other course CIE Marks.
- 5) The final list, incorporating corrections (if any), of CIE marks awarded to the students in the Theory/Practical/Internship/ Mini Project Work/Major-Project Work shall be displayed on the notice board of the college much before the closure of the semester.
- 6) The college/Department shall enter the CIE marks of each on the University's 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 the Principal/ Dean.

#### 220B 4.6. Review Committee for CIE

- 1) Review 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.
- 2) After each test, the Principal/ Dean shall ensure that the evaluation is fair in each of the courses, scheme of valuation is uniformly followed and that the award of marks in the courses follow a normal distribution curve. If there are any lapses or the marks distribution is either left skewed or right skewed, corrective measures shall be taken and the Report to be submitted to the University.
- 3) If the review exercise is done solely for the purpose of unduly favouring the students, the University reserves its right to take punitive action on the concerned.
- 4) There shall be a Review Committee for Internal Assessments in every





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Department, which shall be chaired by the Head of Department and two senior faculty members nominated by the Principal/Dean. This Committee shall be responsible for the entire process of Internal Assessment in the Department, including redressal of grievances, if any.

# 5) Guideline for the Review Committee:

Review may be conducted after each test or after the tests in case there is a large number of failures or high marks, or when large numbers of students have received the same marks, or when there are wide discrepancies between marks allocated to individual students in different courses,

- a) Split-up of marks used for each of the different types of assessment in the course may be checked.
- b) Checking of the questions to find whether it maps to course outcomes.
- c) Checking the difficulty level of questions paper i.e is the difficulty level on the high extreme, very easy or otherwise.
- d) Whether the assessment modes are used to cover the entire syllabus or
- e) Checking the manner of awarding the marks, i.e has correction been at the extremes, liberal or tough?
- f) Moderation should not be restricted to just assessment but also includes the assessment design (scheme of evaluation).
- g) Each college shall submit the moderation committee report to Registrar (Evaluation) along with the CIE marks.

# 220B 4.7. Rejection of Result

- 1) A student is permitted to 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 Programme of study.
- 2) 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.

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- 3) 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, governed by clauses 220B 5.3 and 220B 5.2.
  - a) 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.
  - b) If the rejection of SEE results excluding CIE marks is of an even semester, then students shall be allowed to take admission to the next odd semester.
  - c) Readmission to odd/even semesters 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 University Seat Number (USN).
  - d) Applications for rejection of results excluding CIE 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, with prescribed fee as notified by the University from time to time. Late submission of applications shall not be accepted for any reason.
  - e) Application for rejection of results including CIE and approval for 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 with prescribed fee as notified by the university from time to time. Late submission of application shall not be accepted for any reason.
- 4) Registration for SEE is compulsory if the student/s has satisfied the attendance and CIE requirement of ODD /EVEN semester.

In case, the students fail to register for SEE of the odd semester after satisfying the attendance and CIE requirements of the semester, they shall be permitted to move to an even semester of that academic year.

However, such students have to register for odd semester examinations conducted at the end of the academic year for all the semesters and registration shall be considered for the first attempt.





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In case, students fail to register for the odd semester SEE after completing successfully the even semester, they shall not be permitted to move to the higher odd semester of the subsequent academic year. Irrespective of a student appearing for SEE, he/she has to register for SEE for odd and even semesters before completing the academic year.

5) Students who opt for rejection of results of the University examination shall be eligible for the award of the Degree and Minor Degree but not for the award of ranks and Honors Degree.

# 220B 4.8. Academic Malpractice

Academic malpractices shall be seriously viewed, and appropriate action taken. In case of malpractice during any of the internal examinations like assignments, quizzes, and tests, the Course Teacher/Invigilator shall report the matter to the Principal/ Dean for penal action. If the Principal/ Dean finds that the offence is serious enough or the candidate appeals in writing to the University, then the matter shall be further refered to the Academic Malpractice Committee of the University. However, any malpractice in the SEE shall be reported to the University irrespective of the seriousness of the malpractice.

## 220B 5.0. MAXIMUM DURATION FOR PROGRAMME COMPLETION

# 220B 5.1: Multiple-Entry-Multiple-Exit Options

While earning credits towards their B.E./B.Tech degree, the students may judiciously use the options provided to them through CBCS and MEME clauses in the Regulations, to obtain additional certificate and a B.Sc. degree. However, they shall earn the required credits for the award of the degree within the maximum specified duration.

The following distinctions are awarded under MEME options:

# 1) Certificate in Respective Programmes of Engineering

A student who exit at the end of II year of the programme shall be awarded a certificate, if he/she successfully passes the registered courses and earns:

- (i) Atleast 50% of the credit requirements of B.E./B.Tech. programme. (i.e. 80 credits) However, it is 25% for lateral admission candidates (i.e. 40 credits).
- (ii) Atleast 50% of the programme professional core courses (some specific

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courses may be specified, so the leaving student has decent skills), and

(iii) A minimum CGPA of 5.0.

# 2) B.Sc. in Respective Programmes of Engineering

A student who exit the end of III year of the programme shall be awarded a B.Sc. degree, if he/she successfully passes the registered courses and earns:

- (i) Atleast 75% of the credit requirements of B.E./B.Tech. programme (i.e. 120 credits); and completed atleast 3 years (80 credits and 2 years respectively for lateral admission candidates) in the programme.
- (ii) 100% of programme professional core courses
- (iii) A minimum CGPA of 5.0.

With B.Sc., the student is eligible for entry into programmes which take B.Sc. as admission eligibility criteria.

## 3) Re-entry to complete the programme

A student exiting with a certificate or B.Sc. should be entitled to re-enrol in the programme. All the credits will be transferred, if the student enrols back within a limited period of 3 years of exiting. In case a student enrols after that, then the transfer of credits should be examined by looking at the change in the curriculum from what the student did. Exits are permitted by the University within 15 days of announcement of II year and III year University results, on written request for the award of certificate and B.Sc. degree by a student when he/she is eligible. Corresponding to these two exits, a maximum of two re-entries are permitted with the condition that he/she complete the programme within the maximum specified duration.

# 4) Programme Completion in another Institution

The University permits a student to earn a certificate/B.Sc. in one institution and complete the degree programme in another. This will enhance the value of certificates and the B.Sc. Degree.

#### 220B 5.2. Maximum Duration for Programme Completion

The minimum duration of the program is four academic years for regular students and three years for lateral entry students. Students admitted to first-semester B.E./B. Tech.,





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shall complete the programme within eight academic years from the year of the first admission, failing which they will not be eligible for the award of a degree. Students admitted to third semester B.E./ B.Tech., under the lateral entry category shall complete the programme within six academic years from the year of the first admission, failing which they will not be eligible for the award of degree.

#### 220B 5.3. Readmission

- 1) Students who are temporarily discontinuing the programme and getting readmitted to the eligible semester are permitted subjected to the clause 220B 5.2.
- 2) The permission for readmission is only on request through the Principal and is not treated as a matter of right. Such students shall not claim any benefits based on the readmission.
- 3) 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 semesters of the programme adhering to the Regulations of the prevailing scheme and shall complete additional courses, 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.
- 4) Readmission to odd/even semester shall not be considered as fresh admission and therefore students shall continue to have the same University Seat Number (USN), which was allotted at the time of his/her admission to the programme. The maximum duration of the programme shall be counted with reference to the USN allotted during his/her first admission to the programme.
- 5) A student who has not obtained the eligibility for III semester even after three academic years from the date of admission to I semester shall discontinue the programme or get readmitted to I semester of first year B.E./B.Tech., with a new University Seat Number (USN) but retaining the same year of admission.
- 6) The candidates who have temporarily discontinued the programme 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 the University/other University to non-autonomous constituent/affiliated college of the University,

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- shall be eligible for the award of degree provided the total credits earned at that stage are equal to or greater than the credits prescribed by the University under clause 220B 3.3. and satisfy all other conditions of this Regulations.
- 7) In case, the forecasted or estimated credits are going to be less than that of the credits prescribed by the University on the completion of all the semesters of the programme under the prevailing scheme, the candidate shall register for a course or courses not studied earlier and make up the credits which are equal to or greater than the University prescribed credits.

	0	A+	Α	B+	В	С	P	F
Letter Grade	Outstanding	Excellent	Very Good	Good	Above Average	Average	Pass	Fail
Grade Point	10	9	8	7	6	5	4	0
% of Marks Secured	90-100	80-89	70-79	60-69	55-59	50-54	40-49	0-39

8) In case of any difficulty, Vice-Chancellor shall decide on individual cases, which shall be final.

#### 220B 6.0. GRADING AND VERTICAL PROGRESSION

#### 220B 6.1. Award of Grades:

- 1) The University adopts absolute grading system wherein the marks are converted to grades, and every semester result will be declared with semester grade point average (SGPA) on successful completion of all courses of that semester.
- 2) The total marks obtained by the student in CIE and SEE of a course is expressed as a percentage to compute the grade points and the letter grade is awarded as indicated in the table below:
- 3) If there is no SEE for a course, then the CIE marks alone will be the basis for the determination of letter grade.

#### 220B 6.2. Other Letter Grades:





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The letter grades specified in 220B 6.1 are used as student performance measures in all kinds of assessments. However, the following letter grades are also awarded under the circumstances defined below (Letter Grade: Grade Point - Circumstances).

- 1) DX: 0 Credits are not included in CGPA, Attendance below 75%, hence Repeat the course (In case of electives, course change is permitted)
- 2) AU: 0 Satisfactory in an Audit course
- 3) AB: Absent for the Course
- 4) PP: 0 Passed in Non-credit course
- 5) NP: 0 Not Passed in Non-credit course
- 6) IC: No credits Incomplete (a place holder; gets converted to an appropriate grade after clearing SEE examination else converted to 'F') else automatically converted to 'F'.
- 7) W: No credits Dropped/ withdrawn (W is not a grade but only a place holder indicating that the course has been dropped/withdrawn and it must be cleared in subsequent semesters).

#### 220B 6.3. Passing Standards

#### 1) Maximum and Minimum CIE Marks:

The maximum weightage of CIE mark shall be 50. To appear for the SEE, the minimum CIE marks to be secured in each of the courses shall be 40 % of the maximum marks of CIE.

#### 2) Maximum and Minimum SEE Marks:

The maximum weightage of SEE marks shall be 50 and marks to be secured for passing shall be 35 % of the maximum marks of SEE.

#### 3) Eligibility for Passing a Course:

The overall passing marks shall be 40% of the maximum marks (the sum of the CIE and SEE should be 40% of the maximum marks) of the course. That is, minimum passing grade in a course (head of passing) shall be "P".

#### 4) Semester Passing Standards:

a) A student shall be declared successful or 'passed' in the entire undergraduate programme, only when he secures a Grade Point of 4 ("P" Grade) or above in every registered course in each Semester during the entire programme for the Degree

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Award, as required.

- b) A Student shall be declared successful or 'passed' in any Non-Credit Course if he secures a 'Satisfactory Grade (PP)' for that Mandatory Course.
- 5) A student who satisfy the conditions (1), (2), and (3) above, and obtain any grade from 'O' to 'P' in a course shall be considered to have passed that course.
- 6) A student shall be awarded letter grade in a course as indicated below, if he/she,
  - a) Fails to satisfy the conditions under Section (5) above: 'F' Grade,
  - b) Absents himself/herself from the University examinations: 'AB' Grade,
  - c) Has attendance shortage in a course: 'DX' Grade, and
  - d) Course is Incomplete for any reason: 'IC'.
  - 7) 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 and marked as DX in the grade cards against this course/s. However, they can appear for University examinations conducted for other Courses of the same semester and backlog course/s if any.
  - 8) Students who have satisfied the attendance requirement but not the CIE requirements can be permitted to register afresh and appear for SEE after satisfying the CIE requirements in the same Course(s) when offered during the next immediate semester/s or later.
  - 9) Each appearance to SEE or absence after completing CIE and attendance requirements to complete a course shall be treated as an attempt.

#### 220B 6.4. Vertical Progression

A student progresses according to his/her performance and could register for the higher semesters subjected to conditions under clause 5.2.

# 1) Students admitted to the first year:

a) Students having "F" grades for the courses totaling to more than 16 credits in the  $1^{st}$  and  $2^{nd}$  semesters of the first year of the programme shall not be permitted to to move to the  $3^{rd}$  semester ( $2^{nd}$  year) of the programme. These courses include





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courses marked as DX.

- b) The students who fail to satisfy CIE and attendance requirement shall repeat the courses whenever offered next and become eligible for the 2<sup>nd</sup> year.
- 2) **Obtaining CIE:** From the 3<sup>rd</sup> semester (II year) onwards the student who obtains the required attendance for the course, but not the required CIE marks is allowed to move forward to the next semester. However, the student shall mandatorily obtain the required CIE in the subsequent semester. 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.
- 3) Completion of backlog courses: From 3rd semester (II year) onwards,
  - a) the student who obtains required attendance, CIE, and appearing for SEE obtains "F" Grade shall be allowed to move forward to the next semester (odd /even) irrespective of several "F" grades, subjected to satisfying the clause 220B 3.3 and 220B 5.2.
  - b) there shall be no restriction for promotion from an even to next odd semester (or odd to next even semester) even if the student has not satisfied the attendance requirement in one or more courses (including bridge courses for lateral entry students), but he/she shall not be eligible to appear for SEE in those course(s). Such students shall repeat those courses whenever offered next.
- 4) A student shall be given admission to the 7<sup>th</sup> semester (IV year) provided he/she passes all courses of 1<sup>st</sup> and 2<sup>nd</sup> semesters.
- 5) **Permitted Maximum credits for registration:** The student shall be permitted to register for total courses to an extent subjected to the conditions under clause 220B 3.6.2.
- 6) Successive Failures and alternate course selection:
  - a) If a student not completing a course, other than the professional core course, even after four attempts, may drop that course and choose an alternate course having the same number of credits from the pool of courses suggested by the concerned Board of Studies.
  - b) The course so selected should not have been studied by the student or

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- to be studied in future at higher semesters. The faculty advisor shall guide/advise the student in this regard.
- c) The college shall make arrangements for the registration and conduction of CIE for the alternate course selected.
- d) This provision is given only for two courses (one at a time) during the entire maximum duration of the programme.
- e) This provision is optional; the student/s can continue registering for the same course without opting for a change.

## 220B 6.5. Condition for Re-Registering a Course:

- 1) Students who do not pass the course as per clause 220B 6.3(3) and awarded "F" Grade may Re-Register and improve their performance.
- 2) Such student, after passing the failed course in subsequent examination/s, will be awarded letter grade based on the marks he scores while passing in the subsequent examination/s.

## 220B 6.6. Computation of SGPA and CGPA:

- 1) Semester Grade Point Average (SGPA) will be awarded at the end of each Semester and Cumulative Grade Point Average (CGPA) will be awarded at the end of the program. However, CGPA is calculated at the end of each semester from the second semester onwards and reflected in the grade card for indicating the progress of the student.
- 2) Each course in a program is associated with number of credits (C). Based on the number of Credits for a course and obtained Grade Point (GP) for that course in a Semester, the GPA is calculated as given below:
  - a) The SGPA is the ratio of sum of the product of the number of credits with the grade points secured by a student in all the courses taken by him and the sum of the number of credits of all the courses undergone by a student, i.e.,

$$SGPA = \sum (Ci \times Gi) / \sum Ci$$

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

b) The CGPA is also calculated in the same manner considering all the courses undergone by a student over all the semesters of a programme, i.e.,





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 $CGPA = \sum (Ci \times Si) / \sum Ci$ 

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

Finally, the SGPA and CGPA shall be rounded off to 2 decimal points and reported in the grade cards. An illustrative example to calculate SGPA and CGPA for one academic year is shown in **Annexure-I**.

# 220B 6.7. Conversions of CGPA into Percentage of marks and Class Equivalence

The following formula for conversion of the CGPA on a 10-point scale into the percentage of marks (M) for employment/ higher studies, etc. may be used; Percentage of marks secured, M = CGPA Earned x 10

E.g.: Illustration for a CGPA of 8.20;

Percentage of marks secured, M = 8.20 × 10= 82.0 %

#### 220B 6.8. Class Equivalence

Subsequent to the conversion of final CGPA, after successful completion of the Program, into the percentage of marks (M), a graduating student is reckoned to have passed in

- (i) First Class with Distinction (FCD) if M≥ 70
- (ii) First Class (FC) if 60 ≤M<70
- (iii) Second Class (SC) if  $50 \le M < 60$
- (iv) Pass Class (P) if  $40 \le M \le 50$

#### 220B 6.9. Award of Grade Cards, Certificates and Transcripts:

- (1) **Grade Cards:** At the end of each semester, a Grade Card shall be issued to all the registered students of that semester, indicating the Course code, Title, Number of credits, Letter grade awarded, and Credits earned, for all the Courses as specified in the scheme of teaching and evaluation, along with total credits earned, SGPA, and CGPA as applicable. This may have F grades and other temporary grades awarded to the student.
- (2) **Grade Certificate:** The Grade Certificate, having the same format of Grade card but indicating the month and year of clearing a course, is issued to the student on demand

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only on clearing all the temporary grades specified in the Grade Card.

- (3) **Transcripts:** Transcript is the consolidated statement of the academic performance of a student for all the semesters since joining the programme and is generally given to a student on successful completion of the programme along with the degree certificate.
- (4) For those students who have taken multiple attempts to clear a course, the transcript given on successful completion of the programme will only contain earned pass grade ('O' to 'E', AU and PP); the courses cleared subsequently will however be shown in the respective semester with Month and Year in which the student has finally cleared the course. The transcript will show only the overall CGPA based on all the courses taken by the student. Credits earned beyond the requirement for the award of the degree shall be shown as additional courses separately, indicating the grade earned by the student. Additional copies of the transcript can be obtained if needed, on request submitted along with payment of applicable fee.
- (5) Students who have not yet completed the programme can obtain an interim Transcript at the end of any semester, if needed, on request and upon payment of applicable fee.

  The interim Transcript includes failed courses, which have not been cleared at the time of issue.

# 220B 6.9.1. Mandatory Earning of Activity points:

Sl. No.	Student Category	Activity Points prescribed
1	Regular Students admitted to the 4	100
	year Degree Programme	
2	Students entering 4 year Degree	75
	Programme through lateral entry	
3	Students transferred from other	50
	Universities. To the 5 <sup>th</sup> Semester	

The Activity Points earned shall be reflected on the student's eighth semester Grade Card.

(i) Activity Points (non-credit) have no effect on SGPA/CGPA.

In case a student fails to earn the prescribed activity Points before the





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commencement of 8<sup>th</sup> semester examinations, the Eighth Semester Grade Card shallbe 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 are listed in Annexure –VII

# 220B 7.0. ELIGIBILITY FOR AWARD OF DEGREE, PRIZES, MEDALS, AND RANKS 220B 7.1. B.E./B.Tech. degree

- (a) Students shall be declared to have completed the undergraduate Programme of B.E./B.Tech. degree and is eligible for the award of degree provided they have undergone the stipulated course work of all the semesters under the Scheme of Teaching and Examinations and have earned the prescribed number of credits as per clause 220B 3.3 within the permitted maximum duration specified under clause 220B 5.2.
  - (b) For the award of degree, completion of bridge courses, if any, as applicable is compulsory.

#### 220B 7.2. B.E./B.Tech. (Honors) Degree

- (a) Students shall be declared to have completed the undergraduate Programmme of B.E./B.Tech., degree with Honours, provided they have,
  - (i) Been declared eligible for the award of the degree as per clause 220B 7.1,
  - (ii) Earned additional 18 or more credits through University-approved online courses, and
  - (iii) Satisfied the conditions of "VTU (Award of Honours/ Minor at B.E./B.Tech. Degree Programmes) Regulations, 2022".

#### 220B 7.3. B.E./B.Tech. with Minor Degree

- a) Students shall be declared to have completed the undergraduate Programmme of B.E./B.Tech., degree with Minors, provided they have,
  - (i) Been declared eligible for the award of the degree as per clause 220B 7.1,
  - (ii) has earned additional 18 or more credits through University-approved online courses, and

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(iii) Satisfied the conditions of "VTU (Award of Honors/Minor at B.E./B.Tech. Degree Programmes) Regulations, 2022".

### 220B 7.4. Award of Degree for an Extraordinary Student:

- 1) The University through college can offer a fast-track degree for an extraordinary student. The same is done by offering courses of his/ her choice to fulfill the requirement of the programme in three and half years.
- 2) However, the degree shall be awarded on completion of 04 years.
- 3) The course completion letter shall be issued jointly by the University and the College immediately after completion of the programme, not withstanding the minimum duration.
- 4) The extraordinary student is one with a CGPA  $\geq$  9 in 2<sup>nd</sup> and 3<sup>rd</sup> semesters and continue to maintain the same in all the semesters. Otherwise, his/her registration shall stand canceled automatically.
- 5) Aspirant students shall register with the University through the Principal of the college at the 4<sup>th</sup> semester level, with the prescribed registration fee as fixed by the University from time to time. Such students shall register for more credits, other than the regular semester credits, along with the 5<sup>th</sup> semester registration.

#### 220B 7.5. Noncompliance Cases

#### 1) Noncompliance of Mini-project

The mini-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 mini-project shall be declared fail in that course and shall have to complete the same during subsequent University examinations after satisfying the Mini-project requirements.

#### 2) Noncompliance of Major-project

The Project Work 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 fail in that course and shall have to complete the same during subsequent University examinations after satisfying the Major-project requirements.





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#### 3) Noncompliance of Internship

All the students of B.E./B.Tech. shall have to undergo mandatoryinternship. The internship shall be considered as a head of passing andshall be considered for the award of degree. Those, who do not takeup/complete the internship shall be declared fail in that Course and shallhave to complete the same during subsequent University examinationsafter satisfying the internship requirements.

#### 4) Non compliance to earn credits in Honours and Minors

When a student registering for minor or honours degree is unable to complete all the required courses or earn the required credits within the maximum programme duration or at the time of becoming eligible for the award of the Degree, may withdraw from these additional degree programmes and request for the award of a certificate. The University shall consider those additional courses passed as Value Added Courses and issue a certificate to that effect.

#### 220B 7.6. Award of Prizes, Medals, and Ranks

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 University for such awards.

- (1) For the award of rank in a Specialization of Bachelor of Engineering/Technology, the highest CGPA secured by the students at the end of the VIII semesters shall be considered after having completed the requisite credits.
- (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.

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- b) Is not a repeater in any semester because of rejection of result of a semester/ shortage of attendance /temporarily discontinued and rejoined/readmitted etc.
- c) Has completed all the semesters (I to VIII or III to VIII for lateral entry students) in VTU constituent college or in any VTU affiliated college, excluding the autonomous colleges.
- d) Has not been transferred from any autonomous college affiliated to VTU or 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 an award of ranks in 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 be10.
- 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 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.
- **220B 7.7.** Ranks shall be awarded based on the merit of the students as determined CGPA. If two or more students get the same CGPA, the tie shall beresolved by considering the number of times a student has obtained ahigher SGPA. If it is not resolved even at this stage, the number of times a student has obtained higher grades like S, A+, A, B+ etc., shall be taken in to account to decide the order of the rank.

#### 220B 8.0. CHANGE OF COLLEGE: TRANSFER OF STUDENTS

The Regulations Governing the Change of College shall be followed [Annexure-II].

#### 220B 9.0. CHANGE OF BRANCH

The Regulations Governing the Change of Branch shall be followed [Annexure-III].





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#### 220B 10.0. MISCELLANEOUS

- 1) Guidelines for using Online content in courses at the University and Colleges [Annexure-IV].
- 2) The Regulations Governing the Academic Bank of Credits shall be followed [Annexure-V]

# 220B 11.0. Applicability and Power to Modify

- i) The regulations governing the degree of Bachelor of Engineering/ Technology of Visvesvaraya Technological University shall be binding on all concerned.
- ii) Notwithstanding anything contained in the foregoing, the University shall have the power to issue directions/ orders to address and removal of any difficulty.
- iii) 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

An illustrative example to calculate SGPA and CGPA for one academic year:

Semester (Odd :1, Even: 11)	Course Code	Credits	Grade	Grade Points (GP)	Credit Points (CrP)	SGPA, CGPA
ı	XX11	3	В	8	3x8=24	
ı	XX12	3	Absent(F)	0	3x0=00	$SGPA = \frac{101}{20}$
1	XX13	3	A+	9	3x9=27	$\begin{array}{c} 20 \\ = 5.05 \end{array}$
Ĺ	XX14	3	F	0	3x0=00	_ 5.03
ı	XX15	3	В	6	3x6=18	
Ĭ	XX16	1	С	5	1x5=05	· .
1	XX17	1	A+	9	1x9=09	
	XX18	2	В	6	2x6=12	
I	XX19	1	В	6	1x6 = 06	
	Total	20(14*)	-20%3	Total	101	
14*): Tota calculation	al credits of the	ne semester ex ne two consecu	xcluding the cred utive semesters u	its of the cou nder considera	rses under F g ation.	rade. Considered for t
11	XX21	3	B+	7	3x7=21	
11	XX22	3	Α	8	3x8=24	$SGPA = \frac{178}{26}$
U	XX23	3	В	6	3x6=18	= 26 = <b>6.85</b>
	XX24	3	С	5	3x5=15	= 6.85
11	XX25	3	A+	9	3x9=27	
11	XX26	1	F	0	1x0=00	CGPA
II	XX27	1	Α	8	1x8=08	

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11	XX28	2	A+	9	2x9=18	_ (101 + 178)
II	XX29	1	Α	8	1x8=08	$=\frac{14+25}{14+25}$
l semeste	r			The second second		$=\frac{279}{39}=7.15$
	XX12	3	В	6	3x6=18	
1	XX14	3	B+	7	3x7=21	The state of the s
	Total	26(25*)		Total	178	

(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.

Semester	1	ll l	III	IV	V	VI	VII	VIII
Credits of the semester	20	20	20	20	20	20	24	16
SGPA	5.0	6.73	9.20	6.86	8.18	7.73	9.18	9.40
∑CrP	100	175	220	165	204	185	184	169

$$CGPA = \frac{[100 + 175 + 220 + 165 + 204 + 185 + 184 + 169]}{160} = \frac{[1402]}{160} = 8.76$$

For Lateral Entry Students

$$CGPA = \frac{[220 + 165 + 204 + 185 + 184 + 169]}{120} = \frac{[1127]}{120} = 9.39$$

#### Annexure - II

The Regulations Governing the Change of College:

(@ https://vtu.ac.in/wp-content/uploads/2021/01/Notified-COC-Regulations.pdf)

#### Annexure - III

The Regulations Governing the Change of Branch:

(@ https://vtu.ac.in/wp-content/uploads/2021/01/Notified-COB-Regulations.pdf)





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#### Annexure - IV

# Guidelines for Using Online Content in Courses at the University and Colleges.

#### 1.0. Background

A lot of online high quality content is available today either free or at a low cost. Besides the Government supported NPTEL, there are companies who aggregate courses from several Universities (and even private commercial organizations) and offer them to students all over the world. There are other companies who offer courses designed and developed by them. Further, a lot of companies have online content available to students.

On the other hand, most of the Computer Science (and related) departments face serious shortage of faculty, particularly in areas where there is a significant demand in the industry.

So, on one hand, we have quality content available for free or low cost, and on the other hand, we don't have faculty to teach such courses. The natural solution is to find ways to use online content for the courses in the curriculum (with credits). This way, either a knowledgeable faculty can "teach" a much larger class, or a faculty member with inadequate background in the topic can still "teach" the course better than what he/she would have done without the support of such online content.

#### 1.1. Issues

The online content has been around for several years. The regulatory bodies have also been encouraging use of such content (particularly, NPTEL). And yet, the online content has not been integrated with the curriculum in most colleges. The pandemic has allowed people to take a fresh look at online content and the mental barriers to using such content in the curriculum have been breached. At this time, it is felt that a lot of colleges would want to use this content. However, there are two primary academic issues that need to be addressed (besides logistics, financial, and HR issues). These are:

- 1. How do we decide what material to use? This has two sub-issues. One, what content would be equivalent to the content that is mentioned in our curriculum (course mapping). Note this is a challenge because there may not be a single module which covers all parts of the curriculum. So we may need to select more than one module. Two, given the plethora of content, which content is of reasonable quality.
- 2. How would a college do evaluation of students in order to assign marks/grades?

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#### 1.2. Modes of Learning

There are several ways of using the online content in the curriculum.

The simplest mode (Mode 1) is to use online content as additional reference material. In this mode, the normal teaching is anyway being done and the faculty is referring to online content in the same way he/she would refer to a book. This mode requires no change or suggestions and hence is outside the scope of this document.

The next mode (Mode 2) is the flipped classroom model where the students go through the online content (including writing programs, small quizzes, etc.), and the local faculty takes discussion sessions and does all the evaluation. This mode still requires a knowledgeable faculty member to be the course Teacher. However, given that we can now reduce the contact hours for the students and faculty, the same faculty can handle a much larger class (or multiple sections in case there is an upper limit on the size of the class).

The next mode (Mode 3) is that the students are studying only through the online mode and there is very little interaction with the faculty at the college. May be there can be some sessions once in a while, but mostly, the role of a local faculty is only to handle evaluation (exams, assignments, projects, etc.). This partially addresses the issue of lack of faculty in certain areas since the expertise required for handling evaluation is arguably lesser than the expertise required to teach the course.

The last mode (Mode 4) is where the online provider does everything, including evaluations. We don't need any faculty member at the college to offer this course. We only need to decide how to translate the evaluation done by an outsider to an equivalent grade/ mark on the college transcript.

The table below illustrate the four models in brief.

S. No.	Model	Local Part	Online Part	Guidelines
1	Reference	All lectures,	Additional	No additional recommendations.
	Mode	home works, evaluations	Reference material	This requires no additional details.
2	Flipped Mode	Discussion sessions, evaluations	Lectures, Home works, Quizzes, Project options	Requires local faculty with some knowledge in the subject area.  Large sections/class sizes can be handled





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3	Screen	Evaluations	All lectures,	Place reasonable limit on the number of
	Mode		Home works,	credits that can be earned in this mode.
			Projects	Use in cases where there is faculty
	=			shortage in critical areas.
4	Fully		All lectures,	Place reasonable limit on the number of
	online		evaluations,	credits that can be earned in this mode.
			Projects, Tests	Advised not to repeat this model for the
10	12			same course more than two times.
			9	Local faculty also to register and go
				through the course.
	-	Α.		Official score/grade to be suitably added
				to the student transcript.

#### 1.3. Course Mapping

Each course in the curriculum has course outcomes and the content defined by the University. Typically, we may have some course outcomes which are important ones and may be some outcome which is desirable or optional. Similarly, the curriculum may also define the rough duration of each topic. Sometimes the curriculum will also include the kind of projects or assignments that the student shall be asked to do in the course.

The key to course mapping is to realize that any two individuals defining a course will have some differences and we must be flexible to accept differences to some extent. The committee trying to do course mapping should have an understanding of what are the important components (in all three: outcomes, topics, and projects) and should ensure that the online content meets all the important requirements. But looking for identical course would be usually futile.

Also, what is noticed is that typical online courses are often available in smaller modules than a typical 4- credit course in our curriculum. And therefore, one may need to consider more than one online courses together to be equivalent to one course in the college. It may also be noted that just like some small aspects of the course may not be present in the modules chosen, there may be some aspects of the online modules which were not part of the college course. This amount of flexibility should be acceptable to the college. Typically, if the online content covers 80% of the college course, it may be accepted.

While autonomous colleges and Universities do have this flexibility, the affiliated colleges may not have the flexibility of not teaching even 20% of the content. In case of affiliated colleges, one will have to either be stricter in course mapping or find a way to cover the gaps through a local faculty or a visiting faculty. It is assumed that it is easier to find a visiting faculty for a small part of the course and

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hence it is still a useful mode.

It may also be noted here that for Core courses, the overlap needs to be significantly higher while for the elective courses, the overlap could be relaxed somewhat. It is because the core courses typically are pre-requisites for other courses. Also, core courses have been defined to be such because it is assumed that content is more important for the graduates than what is taught in electives.

However, course mapping is still not an easy thing to do. It requires an understanding of important versus less important components, and quality of content among the plethora of options available. It may require someone to go through the content patiently.

And hence it is recommended that for courses recommended in the curriculum, a course mapping may be suggested for the benefit of colleges by the University.

#### 1.4. Evaluation

In Modes 1, 2, and 3, the complete evaluation is local, and hence there is no issue. In Mode 4, we need to consider an external evaluation and use that internally. This is a challenge. There is a difference in how to handle this in a University versus an affiliating college. In a University, a simple way of handling this would be to assign a Pass/Fail grade to the student. In case of an affiliating college, where only the internal marks need to be forwarded to the University, one could consider the external evaluation since it impacts only 30% of the marks, and the University will anyway have its own exam of 70% marks.

There are other models like normalizing the external evaluation to the college's internal policy or average distribution of marks in other courses.

It is assumed that in Mode 4, there is a formal way of communicating performance of the student by the provider of the online courses since colleges/Universities will not accept screen shots, emails, etc.

#### 1.5. Other Issues

- a) **Financial:** If there is a fee to be paid for online content, the college should have a policy on that. Typically, if the savings due to reduced faculty requirements are significant, then the fees for the online provider shall be reimbursed by the college.
- b) **Teaching Load:** Faculty member supporting the course whether by taking a few discussion sessions (in Mode 2) or by evaluating the students (in Mode 3) is still putting in substantial effort in managing the course, and an appropriate credit should be given to the faculty member when his/her teaching load is computed.





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- c) Training the teacher: When a course is being done in Mode 3, the local faculty member should also be expected to register for the course and go through the course (with load being appropriately counted). After a faculty member has gone through the course in two academic sessions, he/she would be well prepared to teach the course in the class in a much better way. Even if the course is being offered in Mode 4, there is no harm in asking a faculty member to register for the course and go through it. Some responsible person in the college would know the level of the course and what exactly students have done, and again, after two such sessions, the faculty member would be well prepared to teach the course. Hence this mode will also lead to better training of the teachers.
- d) Limits on Credits: The University recommends that there should be a limit on the number of credits students can earn through online courses. In case of Mode 4, where even the evaluation is done by the online course provider, the proposed limit is 8 credits only. As the technology for online exams or the processes for evaluation by online providers improve over a period of time, this limit may be increased. In case of Mode 3 where the content is delivered online but evaluation is local, the limit can be high. For Mode 3 and Mode 4 combined, the limit can be what the regulatory bodies like UGC have announced for online courses, which is currently 40% of the total credits. In Modes 1 and 2 where the online content is really the reference material, there is no need for any limit.

Another constraint the committee would want the colleges to consider is that in a sequence of courses in one stream of Computer Science, at least one course should be in class. For example, if we consider the sequence of systems courses – Operating Systems, Databases, Networks, Architecture, at least one course should be in class. This is to ensure that if there were some gaps in online courses, the faculty in the face to face class can try to cover that to some extent.

e) Faculty Incentive: There is a need to provide some incentive to faculty members who would manage the course that is being taught in the online mode. If a course is being taught in Mode 2, the load on the faculty is only marginally less than the load of teaching an in person course. So the full teaching load should be considered for the faculty. In Mode 3, the load is much less, and in Mode 4, the load is only that we are asking the faculty to also go through the course along with the students. In these two modes, the college may consider this as reduced load. However, their learning the course may be treated as equivalent to having done a Faculty Development Program when it comes to their appraisal and promotions.

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f) Consideration in NBA Accreditation: One of the prime reasons why online courses haven't become popular with colleges is that they must recruit faculty with a certain faculty to student ratio for accreditation and ranking. And once they have recruited faculty, one would always want the faculty to teach and not keep them under-loaded. If one can consider online courses as equivalent to faculty strength while deciding faculty-to-student ratio, then colleges would be attracted to online courses. A typical faculty member teaches about 100 students in a semester (across 2-3 courses). If 100 students do a course in Mode 4, we may consider this as equivalent to having one additional full time equivalent (FTE) faculty member on the rolls of the college for that semester. Similarly, if 200 students do a course in Mode 3, we may consider this as equivalent to having one additional FTE faculty member for that semester.

#### g) Online offering of AICTE Model Curriculum Courses by Experts

It is known that a significant number of colleges do not have adequately qualified faculty to teach the courses in the model curriculum properly. This proposal tries to alleviate this challenge by utilizing our newly acquired comfort level with online education. Essentially, the suggestion is that AICTE incentivizes top faculty to offer the AICTE model courses online and publishes a calendar of such courses well in advance, so colleges/HEIs can use them for teaching the AICTE curriculum.

The following would be the salient features of the proposed scheme.

- 1. All the identified core courses and later on some key electives of the AICTE curriculum may offered regularly (maybe every semester) with a predefined calendar enabling colleges to plan to use them for their students.
- 2. For each course AICTE identifies through a process a set of "Distinguished National Technical Teachers" who are subject experts and who also have experience teaching the course at the undergraduate level.
- 3. These "Distinguished Teachers" are offered financial reward for offering one course online once every 2 to 3 years. The reward must be substantial to make it prestigious as well as attractive. Suitable funding is also made available to the instructor for engaging TAs for help sessions as well as laboratory exercises.
- 4. AICTE can also recognize industry professionals in the panel of distinguished faculty as they can make these courses more interesting and industry oriented. They could teach jointly with





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academics appointed as Distinguished Teachers and handle certain components of the course. The Distinguished Teachers will be encouraged to actively invite guest faculty from industry and/or professional associations (e.g., ACM) to give lectures in these courses to make them more interesting and industry oriented.

- 5. There is a registration procedure for colleges (not individual students) to register for making this course available to their students. They should also commit to assigning an instructor for coordinating classes including infrastructure, conducting assessments, help in grading etc.
- 6. Colleges may be asked to pay a reasonable amount as registration charges so that the scheme is self-sustaining.
- 7. This will be an AICTE scheme for teaching its model curriculum courses by experts. It can be managed by AICTE directly, or it can offer it to another institutions/consortium to manage them. Any platform (e.g., NPTEL) can be used to deliver these courses.

This approach differs from the currently available online courses from NPTEL and other platforms substantially.

- 1. Syllabus for each course is the approved AICTE syllabus.
- 2. The courses would be available against a set calendar each semester making it possible for colleges to rely on them.
- 3. It empowers the college rather than individual students to make use of the online course in a "mixed" mode and thus addresses the deficiency of expertise in specific areas in that college.
- 4. With suitable incentive (both prestige and financial) top experts may be motivated to offer these courses.

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# Annexure - V:

The Regulations Governing the Academic Bank of Credits: (to be framed)



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#### Annexure - VI:

#### ASSESSMENT AND EVALUATION IN SPECIFIC COURSES

#### [Recommendations of the Joint Board of Studies]

# 220B A6.1. CIE and SEE Assessment in Specific Courses:

Examination and Evaluation for all the courses shall be done as specified under Sections 220B 4.1, 220B 4.2 and 220B 4.3 of this Regulations for SEE and CIE. However, for some specific courses, the procedure is made clear in the following sections.

#### 220B A6.1.1. CAED

The CIE marks for CAED course offered in the 1st year shall be assessed as follows:

- 1) The CIE marks awarded in the case of Drawing shall be based on weekly evaluation of the classwork (sketching and computer- aided drawing) with each drawing evaluated as mentioned module-wise in the syllabus. The marks for all the drawing sheets are added and scaled down to 30 marks.
- 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 classwork evaluation and test marks.

# 220B A6.1.2. Engineering Graphics/ Drawing /Field Works

# 1) Engineering Graphics and Drawing (Laboratory Course)

- a) The CIE marks awarded for higher semester Engineering Graphics/ Drawings/
  Design Drawings offered by various branches shall be based on the evaluation
  of the sheets and one test in the ratio 80:20. Method of assessing the CIE
  for such courses shall as per the scheme of Teaching and Evaluation of the course.
- b) The SEE shall be conducted and evaluated for a maximum of marks 100. Marks obtained shall be accounted for SEE final marks, reducing it by 50%.
  - (i) SEE will be conducted by the two examiners of the same institute appointed by the Principal.
  - (ii) Question paper shall be set jointly by both the Examiners and made available for each batch as per schedule. Examiners may refer question bank for this purpose.

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(iii) Evaluation shall be carried out jointly by both examiners as per the scheme of Teaching and Evaluation.

#### 2) Field Works

a) Field works include Surveying Practice/ Socio-Economic survey/ Marketing survey/ traffic survey/environmental survey. The CIE marks shall be split into two components with 80% of maximum marks (40 marks) are considered 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 datafor design drawing, and report. The split-up of marks for the report shall be decidedby the faculty member who is guiding them for the design drawing and report. The criteria for split-up of marks shall be done to achieve the course outcomes. The report evaluation shall be carried out for 100 marks and scored marks shall be scaled down to 40 marks.

The assessment shall be through a presentation of the report followed by the viva-voce. This test shall be conducted by the fieldwork project guide and fieldwork coordinator. If the fieldwork coordinator happens to be the same faculty, then, HOD or senior faculty member will conduct the test with the guide. A test similar to SEE shall be conducted for 100 marks and marks scored shall be scaled down to 10 marks.

The sum of the report and test marks shall be the total CIE marks for fieldwork.

b) SEE for fieldwork Conducted by the two examiners of the same institute appointed by the University. Report and design drawing evaluation and vivavoce are in the ratio of 60:40. Fieldwork will be jointly evaluated by the Internal and External examiners and the duration of SEE shall be three hours.

#### 220B A6.1.3. Practical Courses:

#### 1) CIE for Practical Work Courses

- a) CIE marks for a practical course shall be 50 Marks. The split-up of CIE marks for record/ journal and test to be split in the ratio 60:40.
  - (i) Each experiment to be evaluated for conduction with observation sheet





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and record write-up. Spit up of marks for the evaluation of the journal/write-up for hardware/software experiments designed by the faculty who is handling the laboratory session and shall be made known to students at the beginning of the practical session.

- (ii) Record shall contain all the specified experiments in the syllabus and each experiment write-up be evaluated for 10 marks.
- (iii) Total marks scored shall be scaled downed to 30 marks (60% of maximum marks).
- (iv) Weightage to be given for neatness and submission of record/writeup on time.
- (v) Department shall conduct one test for 100 marks, after the completion of the experiments.
- (vi) In test write-up, conduction of experiment, acceptable result, and procedural knowledge shall carry a weightage of 60% and the rest 40% for viva-voce.
- (vii) The suitable split up of marks can be designed to evaluate each student's performance and learning ability.
- (viii) The test marks out of 100 shall be scaled down to 20 marks (40% of the maximum marks).
  - The Sum of scaled-down marks scored in the report write-up/journal and marks of the test shall be the total CIE marks scored by the student.
- b) Internal tests for laboratory courses with software experiments shall be conducted for a total of 100 marks at the end of the semester, jointly by the class Teacher and a Senior faculty nominated by the Principal.
  - In this evaluation, Observation, write-up of procedure/ Algorithm/program, and execution of experiment shall be assessed for 80 marks and the Vivavoce for 20 marks.

Marks scored out of 100 shall be scaled down to 50 marks.

### 2) SEE for Practical Work Courses

- 1) The SEE marks for the practical courses shall be 50 Marks.
- 2) SEE shall be conducted jointly by the two examiners of the same institute

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appointed by the University.

- 3) All laboratory experiments are to be included for practical examination.
- 4) Breakup of marks and the instructions printed on the cover page of the answer script are to be strictly adhered to by the examiners. OR Based on the course requirement, a split-up of marks for evaluation shall be decided jointly by the examiners.
- 5) Students shall pick one question (experiment) from the questions pool prepared by the examiners jointly.
- 6) Evaluation of write-up/ conduction procedure and result/viva will be conducted jointly by the examiners.
- 7) The split-up of maximum allocated marks for SEE are:
  - (i) procedure/ writeup 20%,
  - (ii) Conduction and result 60%,
- (iii) Viva-voce 20%
- 8) SEE for the practical course shall be evaluated for 100 marks and scored marks shall be scaled down to 50 marks.
- 9) Change of experiment is allowed only once and 20% Marks allotted to the procedure/write-up part to be made zero (Evaluation is to be carried out for 80% of total maximum marks).
- 10) The duration of SEE shall be three hours.

#### 220B A6.1.4. Internship

1) The Internship shall be taken up during the period specified in the Scheme of Teaching and Examinations.

The Department/ College shall nominate faculty 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 the internship shall be as mentioned in the scheme of Teaching and Examination.

The Internship examination shall be conducted at the end of the internship period.

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- 2) **Report evaluation:**Internship shall be evaluated for 50% maximum marks. The split-up of marks suggested for report evaluation shall be based on,
  - a) Report formatting (20% of marks of CIE for report)
  - b) Presentation of the outcomes in the report (40% of marks for CIE for report) and
  - c) Technical content of the report (40% of marks for CIE for report)
    Weightage shall be given for paper publication in reputed journals/refereed
    journals/ Conferences/Product developed/ Patent filed only for Industry/
    Research Internship.
- 3) **Viva-Voce** shall be conducted for 50% of marks of CIE. The split-up of marks suggested are:
  - a) For demonstration of (soft) skills/Engineering Knowledge gained (50% of marks of CIE for Viva-voce).
  - b) The question-answer session will check for the understanding of the fundamentals and concepts (40% of CIE marks for Viva-voce)
  - c) Clarity in answering the questions (10% of CIE marks for Viva-voce) Viva-voce shall be conducted by the Mentor/ Guide and Head of the Department/ one of the senior faculty assigned by the Head of the department.
- 4) Those who do not complete the internship shall be declared Fail and shall complete it during subsequent University examinations after satisfying the internship requirements during subsequent semesters.

#### 220B A6.1.5. Seminar

- 1) The maximum marks prescribed for the Seminar and the evaluation process shall be notified by the University/ College before offering the course.
- 2) The Seminar performance evaluation shall be a part of CIE only in a course where required.
- 3) The Seminar shall be assessed as indicated below.
  - a) The Head of the Department shall make arrangements for the conduct of seminars through a committee of 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

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- three senior faculty members of the Department and the most senior among them shall be the Chairperson.
- b) The marks awarded for Seminar shall be based on the evaluation of the Seminar Report, Presentation skill, and Viva-voce (Question & Answer session) in the ratio of 50:25:25.
- c) Split up Marks to be assessed as follows:
- (i) Report marks to be allotted by the seminar guide/s(50% of the maximum marks)
  - A). Formatting of the report (10% of maximum marks)
  - B). Literature survey (20% of maximum Marks) and
  - C). Technical content of the report (20% of maximum marks)
- (ii) Seminar Presentation skill marks to be allotted by the committee: (25% of the maximum marks)
- (iii) Viva-Voce marks to be allotted by the committee: (25% of the maximum marks)
  - A). Understanding of fundamentals and concepts (15%)
  - B). Clarity in answering the questions (10%)

#### 220B A6.1.6. Mini-Project

- The Mini-Project performance of a student shall be evaluated under CIE only.
   The maximum marks rescribed for CIE shall be as mentioned in the Scheme of Teaching and Evaluation.
- 2) 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 Faculty guide/mentor and two senior faculty members of the Department and the most senior among them shall be the Chairperson.
- 3) The CIE marks awarded for Mini-Project, shall be based on the evaluation of the Mini-Project Report, Project Presentation skill, and Viva-Voce (Question and Answer session) in the ratio of 50:25:25.
- 4) The marks awarded for the Mini-Project report shall be the same for all the students of the batch. The faculty guide/ mentor guiding the Mini-project shall Evaluate the performance for 50% of the maximum marks of CIE for the





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report.

- 5) This committee shall evaluate Mini-project Work for the rest of 50% of the maximum marks considering performance in project presentation and Viva-Voce (question-answer session).
  - a) Project presentation: 25% of maximum marks
  - b) Viva-Voce (Question and answer session):25% of maximum marks

# 220B A6.1.7. Project Work

- 1) The project work shall be evaluated considering both CIE and SEE; The CIE and SEE marks shall be as mentioned in the Scheme of Teaching and Evaluation.
- 2) The CIE marks awarded for Project Work shall be based on the evaluation of the Project Report, Project Presentation skill, and Viva-voce in the ratio of 50:25:25.
- 3) The marks awarded for the Project report shall be the same for all the students of the batch.
- 4) The Head of the Department shall make arrangements for the conduct of Viva-Voce for evaluation of the project work. The committee shall consist of the faculty guide/mentor and two senior faculty members of the Department and the most senior among them shall be the Chairperson.
- 5) The faculty guide/ mentor guiding the project shall Evaluate the performance for 50% of the maximum marks of CIE for the report.
- 6) This committee shall evaluate Project Work for 50% of the maximum marks considering the project presentation and question-answer session.
  - a) Project presentation: 25% of maximum marks
  - b) Question and answer session: 25% of maximum marks

## 220B A6.2. SEE Assessment in Specific Courses:

# 220B A6.2.1. Theory Course with 4, 3 and 2 Credits

The SEE for theory courses shall be conducted by the University as per the scheduled timetable for all, with common question papers for the course. The duration of examination shall be three hours.

1) The question paper will have ten questions. Each question is set for 20 marks.

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The medium of the question paper shall be ENGLISH unless otherwise it is mentioned.

- 2) There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub-questions), should have a mix of topics under that module.
- 3) The students have to answer 5 full questions, selecting one full question from each module.
- 4) Marks scored will be proportionally scaled down to 50 marks.

## 220B A6.2.2. Integrated Course (I/c) /Integrated Professional Core Courses (IPCC)

For a course where theory is integrated with Laboratory course, the SEE duration for the theory part shall be three hours, as specified in section **220B 4.3.** However, the question paper in the SEE examination shall include at least one question from the Laboratory component.

#### 220B A6.2.3. Theory Course with 1 Credit

The SEE question paper shall have MCQ(multiple choice questions) set for 50 questions, each carrying one mark. The time duration for SEE is one hour.

#### 220B A6.2.6. Practical Work Courses

- 1) The SEE marks for the practical courses shall be 50 Marks.
- 2) SEE shall be conducted jointly by the two examiners of the University/ College appointed by the University.
- 3) All laboratory experiments are to be included for practical examination.
- 4) Breakup of marks and the instructions printed on the cover page of the answer script are to be strictly adhered to by the examiners. OR Based on the course requirement, a split-up of marks for evaluation shall be decided jointly by the examiners.
- 5) Students shall pick one question (experiment) from the questions pool prepared by the examiners jointly.
- 6) Evaluation of write-up/ conduction procedure and result/viva will be conducted jointly by the examiners.
- 7) The split-up of maximum allocated marks for SEE are:
  - a) procedure/ writeup 20%,





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- b) Conduction and result in 60%,
- c) Viva-voce 20%
- 8) SEE for the practical course shall be evaluated for 100 marks and scored marks shall be scaled down to 50 marks.
- 9) Change of experiment is allowed only once and 20% Marks allotted to the procedure/write-up part to be made zero (Evaluation is to be carried out for 80% of total maximum marks).
- 10) The duration of SEE shall be two or three hours.

#### 220B A6.2.7. Internship

- 1) SEE shall be conducted by the Internal and external examiners approved by the University. The internal examiner shall be the guide for SEE. The external Guide for the Internship shall be the external examiner for SEE.
- 2) 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.
- 3) In case the external Guide expresses his inability to conduct the Examination at the last moment, the Principal /Chief Superintendent appointed by the University for the concerned examination of the Institute shall appoint a senior faculty of the Department to conduct the Examination along with the internal Guide.
- 4) Split up of marks for evaluation may be the same as suggested for CIE or Internal and external examiners shall devise split up of marks for SEE and the same may be submitted to the University along with evaluation marks.

#### 220B A6.2.8. Project Work

- 1) The project work shall be evaluated for 200 marks with CIE of 100 marks and SEE of 100 marks.
- 2) The Project Work will be conducted by the two examiners one internal and one external examiner appointed by university.
- 3) SEE marks for the project shall be awarded using appropriate Rubrics based on the quality of work& report, presentation skills, and viva-voce in the ratio 50:25:25 respectively.

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Annexure -VII:

**Guidelines and Suggestive Activities under Activity Points** 



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#### **Annexure-VIII**

# **Evaluation Methods Illustrated using L:T:P**

I	Programme Name:					
5	Scheme of Teac	thing and Evaluation: First	Semester			
SI. No.	Code	Course	Category of Course	Teaching Faculty	Contact Hours/ week	Credits L-T-P = Total
1	3BAS1 101					
2	3BAS1 102	Data Structures	DCC-2		3	3-0-0=3
3	3BAS1 103	Programming for Problem Solving	DCC-3		5	3-0-1=4
4	3BAS1 104					
5	3BAS1 105					
		Total:	- <del> </del>			20 - 0 - 0 = 20
		Table B	First Semest	er Template		

	Programme Name: Scheme of Teaching and Evaluation: First Semester					
5						
Sl. No.	Code	Course	Category of Course	Teaching Faculty	Contact Hours/ week	Credits L-T-P = Total
1	3BAS1 101					
2	3BAS1 102					
3	3BAS1 103	Programming for Problem Solving	DCC-3		3	3-0-0=3
4	3BAS1 104					
5	3BAS1 105					
6	3BAS1 106	Programming for Problem Solving Lab	DCC-3		4	0-0-2=2
		Total:				20 - 0 - 0 = 20
		Table C	First Semest	er Template		

**Example Cases**: A) L-T-P = 3-0-0 = 3 credits (3 contact hours)

B) L-T-P = 3-0-1 = 4 credits (5 contact hours)

C) L-T-P = 3-0-2 = 5 credits (7 Contact hours)

A. Possibile Situations: { All are under 'Heads of passsing'}

Case A1: 3-0-0 (Table B)

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**Case B1:** 3-0-1. (Table B)

[Integrated case]

Case B2: 3-0-0 and 0-0-1.

[SEE internally for lab]

**Case C1**: 3-0-2 (Table C)

[ To be shown as separate Head of passing]

: 3-0-0 and 0-0-2.

[SEE by University]

1) Case A1: 3-0-0 (Table B)

Theory CIE = A + B = (25+25) = 50. [220B 4.2(1) = 22 OB 4.2(2)  $\leftarrow$  A; 220B 4.2 (3)  $\leftarrow$ B]

If CIE  $\geq$  40%, then eligible for SEE.

[220B 4.2(5)]

CIE + SEE  $\geq$  40% for a Pass ('P' Grade)

2) Case B1: 3-0-1. (Integrated case) (Table B)

Theory CIE (T) = A + B = (5+20) = 25. [220B 4.2(1) = 22 OB 4.2(2)  $\leftarrow$  A; 220B 4.2 (3)  $\leftarrow$ B]

If CIE (T)  $\geq$  40%, then eligible for SEE.

[220B 4.2(5)]

Lab CIE (L) = A + B = (15+10) = 25 [220B 4.2(1) = 22 OB 4.2(2)  $\leftarrow$  A; 220B 4.2 (3)  $\leftarrow$ B]

If CIE (L)  $\geq$  40%, then eligible for SEE.

[220B 4.2(6)]

CIE + SEE ≥ 40% for a Pass ('P' Grade)

3) Case B2: 3-0-1 (Not Integrated case) (Table B)

Theory CIE (T) = A + B = (25+25) = 50. [220B 4.2(1)= 22 OB 4.2(2)  $\leftarrow$  A; 220B 4.2 (3)  $\leftarrow$ B]

If CIE  $\geq$  40%, then eligible for SEE.

[220B 4.2(5)]

Lab CIE (L) = A + B = (25+25) = 50 [220B 4.2(1)= 22 OB 4.2(2)  $\leftarrow$  A; 220B 4.2 (3)  $\leftarrow$ B]

If CIE (L)  $\geq$  40%, then eligible for SEE.

[220B 4.2(6)]

CIE + SEE  $\geq$  40% for a Pass ('P' Grade)

4) Case C1: 3-0-2 (Table C) [Shown as separate Head of passing 3-0-0 and 0-0-2] [SEE

for theory and Lab conducted by University]

Theory CIE (T) = A + B = (25+25) = 50. [220B 4.2(1)= 22 OB 4.2(2)  $\leftarrow$  A; 220B 4.2 (3)  $\leftarrow$ B]

If CIE  $\geq$  40%, then eligible for SEE.

[220B 4.2(5)]

Lab CIE (L) = A + B = (25+25) = 50 [220B 4.2(1) = 22 OB 4.2(2)  $\leftarrow$  A; 220B 4.2 (3)  $\leftarrow$ B ] If





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CIE (L)  $\geq$  40%, then eligible for SEE.

[220B 4.2(6)]

CIE + SEE  $\geq$  40% for a Pass ('P' Grade)

IPCC-Case B1: 3-0-1. (Integrated case) (Table B)

Theory CIE (T) = A + B = (25+25) = 50. [220B 4.2(1)= 22 OB 4.2(2)  $\leftarrow$  A; 220B 4.2 (3)  $\leftarrow$ B]

If CIE (T)  $\geq$  40%, then eligible for SEE.

[220B 4.2(5)]

Lab CIE (L) = A + B = (25+25) = 50 [220B 4.2(1) = 22 OB 4.2(2)  $\leftarrow$  A; 220B 4.2 (3)  $\leftarrow$ B]

If CIE (L)  $\geq$  40%, then eligible for SEE.

[220B 4.2(6)]

CIE + SEE ≥ 40% for a Pass ('P' Grade)

#### Assessment Details (both CIE and SEE)

I Para: ---

CIE + SEE = 
$$50\% + 50\% = 100\%$$
  
=  $40\% (20/50) + \ge 35\% (18/50)$ ,  
CIE +SEE  $\ge 40\% (40/100)$ ,

II Para: CIE 
$$(T) = (50)$$

$$CIE(T) = A+B = 25 + 25 = 50$$

$$(25) = > 20 + 20$$

Theory CIE (T) = A + B = 
$$(25+25)$$
 = 50. [220B 4.2(1) = 22 OB 4.2(2)  $\leftarrow$  A; 220B 4.2 (3)  $\leftarrow$ B]  
If CIE (T)  $\geq$  40%, then eligible for SEE. [220B 4.2(5)]

Lab CIE (L) = A + B = 
$$(25+25)$$
 = 50 [220B 4.2(1) = 22 OB 4.2(2)  $\leftarrow$  A; 220B 4.2 (3)  $\leftarrow$ B]  
If CIE (L)  $\geq$  40%, then eligible for SEE. [220B 4.2(6)]







# ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

ವಿಟಿಯುಅಧಿನಿಯಮ೧೯೯೪" ರಅಡಿಯಲ್ಲಿಕರ್ನಾಟಕಸರ್ಕಾರದಿಂದಸ್ಥಾಪಿತವಾದರಾಜ್ಯವಿಶ್ವವಿದ್ಯಾಲಯ

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

State University of Government of Karnataka Established as per the VTU Act, 1994" JnanaSangama" Belagavi-590018, Karnataka, India

Prof. B. E. Rangaswamy, Ph.D.

REGISTRAR

REF: VTU/BGM/Aca/BoS/2023/ 7582

Phone: (0831) 2498100

Fax: (0831) 2405467

#### NOTIFICATION

Subject:

Regulations Governing the award of MBA(2022 scheme)

regarding...

Reference: JBOS 10.02.2023 and 171st EC meeting Proceeding no. 2.2.1

dated: 23.02.2023

Pursuant to the aforesaid Executive Council Proceedings the Regulations Governing the award of a degree in Master of Business Administration under Outcome-based education and choice-based credit system (2022) are hereby notified.

These regulations are applicable to students who are admitted to the 1st semester (1st year) of the MBA program from the academic year 2022-23. The previous regulations in this regard are treated as null and void.

> Sd/-Registrar

To,

All the Principals of Engineering Colleges where MBA programs being offered, The Chairperson and Program Coordinator, Department of Business Administration, PG Centres' VTU Belagavi.

#### Copy to

- 1. To the Hon'ble Vice-Chancellor through the secretary to VC for information
- 2. The Registrar (Evaluation) for information
- 3. The Director (1/c) ITI SMU VTU Belagavi for information and make arrangements to upload it on the VTU web portal.
- 4. The Special Officer QPDS Examination section VTU Belagavi
- 5. Office Copy

# Visvesvaraya Technological University, Belagavi

Jnana Sangama, Belagavi – 590 018, Karnataka Phone: 0831 -2498100/2405468 Fax; 2405467 E – Mail: registrar@vtu.ac.in, Web: www.vtu.ac.in



# REGULATIONS GOVERNING THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION (MBA)

Under Outcome Based Education (OBE)

AND

Choice-Based Credit System (CBCS) Scheme Effective from the academic year 2022 -23

Regulation Clause	Title	Page Number
	Definitions of Keywords	03
22OMB1.0	Title, Duration and Credits of the Programme of Study	06
22OMB2.0	Eligibility for Admission (As per the Government orders issued from time to time)	06
22OMB3.0	Courses	07
22OMB4.0	Internship	08
22OMB5.0	Project	08
22OMB6.0	Computation of SGPA and CGPA	10
22OMB7.0	Conversions of Grades into Percentage and Class equivalence	13
22OMB8.0	Continuous Internal Evaluation and Semester End Evaluation	13
22OMB9.0	Eligibility for Passing and Award of Degree	14
22OMB10.0	Attendance Requirement	15
220MB11.0	Promotion and Eligibility (Vertical Progression)	15
22OMB12.0	Temporary Discontinuation/Break in the Program	15
22OMB13.0	Award of Prizes, Medals and Ranks	16
22OMB14.0	Applicability and Power to Modify	16

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22OMB14.2	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. ■

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## Visvesvaraya Technological University, Belagavi Regulations Governing the Degree of MBA

# Under Outcome Based Education (OBE) and Choice Based Credit System (CBCS) Scheme Effective from academic year 2022 -23

22OMB11.3	The Mandatory non – credit courses, if any, shall not be considered for the Eligibility criterion prescribed for promotion, award of Class, calculation of SGPA and CGPA. However, a pass in the above courses is mandatory before the completion of Degree. ■
22OMB12.0	Temporary Discontinuation/Break in the Program
22OMB12.1	(a) If a candidate, for any reason, temporarily discontinues the Programme or takes a break from programme during any semester, he/she may be permitted to continue in the programme by registering to the same semester of the prevailing scheme.
22OMB12.1 (continued)	The Candidate shall complete all the remaining course work subject to the provision 22OMB1.4. Also the Candidates may have to complete additional course/s, if any, as per the decision of concerned Board of Studies and approval of Dean, Faculty of Management, on establishing equivalence between two schemes. A Grade card shall be issued to that effect. Additional course/s shall not be considered for the eligibility criterion prescribed for promotion. However, based on the individual cases, it is considered to decide the SGPA and CGPA to admit the student for the award of degree. Such candidate shall not be eligible for the award of rank.  (b) Candidates who take admission to any semester of the existing scheme from another scheme, as a repeater/fresher because of various reasons have to complete additional course/s, if any, as per the decision of concerned Board of Studies and approval of Dean, Faculty of Management, on establishing equivalence between two schemes. A Grade card shall be issued to that effect. Additional course/s shall not be considered for the eligibility criterion prescribed for promotion. However, based on the individual cases, it is considered to decide the SGPA and CGPA to admit the student for the award of degree. Such candidate shall not be eligible for the award of rank.  Award of Prizes, Medals and Ranks
22OMB13.1	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 University for such awards.
22OMB13.2	<ul> <li>(1) For the award of rank in a Specialization of MBA, the CGPA secured by the student on completion of the program is considered.</li> <li>(2) A student shall be eligible for a rank at the time of award of MBA, provided the student (a) Is not a repeater in any semester</li> <li>(b) Has not rejected the results of any semester.</li> <li>(c) Has passed I to IV semester in all the courses in first attempt only</li> <li>(3) The total number of ranks awarded shall be 10 % othe a total number of students who appeared in IV semester of the program subject to a maximum of 10 ranks.</li> <li>Illustration:</li> <li>(a) If 150 students appeared for the IV semester, the number of ranks to be declared will be 10.</li> <li>(b) If 84 students appeared for the IV semester, the number of ranks to be declared will be 08.</li> <li>(c) In case of a fractional number of ranks, it is rounded to a higher integer only when the first decimal place value is greater than or equal to 5. ■</li> </ul>
22OMB13.3	Ranks are 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 higher SGPA. If it is not resolved even at this stage, the number of times a student has obtained higher grades like O, A+, B+ etc., shall be taken into account to decide the order of the rank.
22OMB14.0	Applicability and Power to Modify
22OMB14.1	The regulations governing the Degree of MBA of Visvesvaraya Technological University shall be binding on all concerned. ■

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22OMB9.6	If the rejection of the University examination results of the semester happens to be of an odd semester, the candidate can take admission to the immediate next even semester. However, if the rejection of the University result is of even semester, the candidate cannot take admission to the next odd semester.
22OMB9.7	Application for rejection shall be submitted to the Registrar (Evaluation) through the Principal of the college, within thirty days from the date of announcement of results.
22OMB9.8	A candidate with a history of rejection of results of a semester shall be eligible for the award of class and distinction, but shall not be eligible for the award of rank.
22OMB9.9	Eligibility for Award of Degree:  A student shall be declared to have completed the degree of MBA, provided the student has undergone the stipulated course work as per the regulations and has earned the prescribed Credits, as per the Scheme of Teaching and Examination, of the programme.
22OMB10.0	Attendance Requirement
22OMB10.1	Registration and Enrolment:  (i) Except for the first semester, registration for a semester will be done during a specified week before the semester end examination of the previous semester.  (ii) The registration sheet shall have the Candidate details, course name and code, number of credits and category (core/elective/audit) for each course of that semester.  (iii) The Faculty Adviser, assigned by the Head of the Department, will counsel the students in planning their courses of study and provide guidance, motivation, emotional support, and enable the mentees to reach the desired professional and career goals.
22OMB10.2	Courses of each semester shall be treated as a separate unit for calculation of the attendance.
22OMB 10.3	A candidate has to put in a minimum attendance of 85 % in each course with a provision to condone 10 % of the attendance by the Vice-Chancellor on the specific recommendation of the Principal of the college where the candidate is studying, based on medical grounds, participation in NSS/NCC/Red Cross /Republic Day and Independence Day parades/University/ State/ National/ International level sports and cultural activities, seminars, workshops, paper presentation etc., of significant value. The necessary documents in support are to be submitted along with recommendations to condone the shortage.
22OMB10.4	In case of late admission, approved by competent authority (Karnataka Examination Authority/VTU), to I semester of the programme the attendance shall be reckoned from the date of admission to the programme.
22OMB10.5	A candidate, who does not satisfy the attendance requirement (in one or more Courses) as mentioned in 220MB10.3 shall not be eligible to appear for the SEE of that semester and shall not be permitted to take admission to next higher semester. The candidate shall be required to repeat that semester during the subsequent year.
22OMB10.6	Principals of the concerned colleges shall notify regularly, the list of candidates who fall short of attendance.
22OMB10.7	The list of the candidates falling short of attendance shall be sent to the University at least one week prior to the commencement of the examination.
22OMB11.0	Promotion and Eligibility (Vertical Progression)
22OMB11.1	Promotion: There shall be no restriction for promotion from an odd semester to the next even semester, provided the student has fulfilled the attendance requirement.
22OMB11.2	<ul> <li>(a) Candidates, with not more than four backlog courses of first year shall be eligible for taking admission to the second year (III semester).</li> <li>(b) Each credit course shall be treated as a head of passing. ■</li> </ul>



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22OMB8.7	The CIE marks shall be sent to the university by the Principals well in advance before the commencement of Semester End Examinations. No corrections of the CIE marks shall be entertained after the submission of marks list to the University.
22OMB8.8	Candidates obtaining less than 50% of the CIE marks in any course (Theory/Internship/Project) shall not be eligible to appear for the University examination in that course/s. In such cases, the Head of the Department shall arrange for the improvement of CIE marks in the course when offered in the subsequent semester subject to the provision of 22OMB1.4.■
22OMB8.9	Semester End Evaluation: There shall be a University examination at the end of each semester. Setting Theory Question Papers and Evaluation: Question papers in theory courses shall be set by the Examiners appointed by the University.
22OMB8.10	There shall be the double valuation of theory papers. The theory Answer booklets shall be valued independently by two examiners appointed by the University.
22OMB8.11	If the difference between the marks awarded by the two Examiners is not more than 15 per cent of the maximum marks, the marks awarded to the candidate shall be the average of two evaluations.■
22OMB8.12	If the difference between the marks awarded by the two Examiners is more than 15 per cent of the maximum marks, the answer booklet shall be evaluated by a third Examiner appointed by the University. The average of the marks of nearest two valuations shall be considered as the marks secured by the candidate. In case, if one of the three marks falls exactly midway between the other two, then the highest two marks shall be taken for averaging.
22OMB9.0	Eligibility for Passing and Award of Degree
22OMB9.1	<ul> <li>(1) A student who obtains any grade O to C shall be considered as pass in any course and if a student secures F grade in any of the head of passing he/she has to reappear in that head for the SEE.</li> <li>(2) A student shall be declared successful at the end of the Program for the award of Degree only on obtaining CGPA ≥ 5.00, with none of the Courses remaining with F Grade.</li> <li>(3) In case, the CGPA falls below 5.00, the student shall be permitted to appear again for SEE for required number of courses and attempts, subject to the provision of 220MB1.4, to make up CGPA ≥ 5.0. The student should reject the SEE results of the previous attempt and obtain written permission from The Registrar (Evaluation) to reappear in the subsequent SEE. ■</li> </ul>
22OMB9.2	For a pass in a theory course, the student shall secure a minimum of 40 % of the maximum marks prescribed in the Semester End Examination and 50 % of marks in CIE, and 50 % in the aggregate of CIE and SEE marks. The Minimum Passing Grade in a course is C.
22OMB9.3	For a pass in the Internship/ Project/Dissertation/Viva-voce examination, a student shall secure a minimum of 50 % of the maximum marks prescribed for the SEE in Internship/Project/ Dissertation / Viva-voce. The Minimum Passing Grade in a course is C.
22OMB9.4	IV semester students having backlog courses are permitted to upload the dissertation report and to appear for SEE. The IV semester grade card shall be released only when the student completes all the backlog courses and become eligible for the award of degree. ■[To be read along with 22OMB11.2].
22OMB9.5	A candidate may at his/her desire reject his/her latest semester, except the IV semester results of University examination in respect to all courses of that semester. Rejection shall be permitted only once during the entire Programme. The CIE marks of the rejected semester shall remain the same.  Rejection of results of the University examination including CIE marks is not permitted.

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# Under Outcome Based Education (OBE) and Choice Based Credit System (CBCS) Scheme Effective from academic year 2022 -23

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22OMB6.3	Grade Card: Based on the secured letter grades, grade points, SGPA and CGPA, a grade card for each semester and a consolidated grade card indicating the performance in all semesters shall be issued.
22OMB7.0	Conversions of Grades into Percentage and Class Equivalence
22OMB7.1	Conversions of Grades into Percentage and Class Equivalence Conversions of CGPA into Percentage of marks and Class Equivalence There is no formula for the conversion of CGPA into the percentage of marks. However, the following formula for conversion of the CGPA on a 10-point scale into the percentage of marks (M) for employment / higher studies, etc may be used;  Percentage of marks secured, M = CGPA Earned x 10  Illustration for a CGPA of 8.20;  Percentage of marks secured M = 8.20×10
	= 82.0
22OMB7.2	Class Equivalence: After the conversion of final CGPA into percentage of marks (P), a graduating student is reckoned to have passed in (i) First Class with Distinction (FCD) if P ≥ 70% (ii) First Class (FC) if P ≥ 60% but <70% and (iii) Second Class (SC) if P < 60%.
22OMB8.0	Continuous Internal Evaluation and Semester End Evaluation
22OMB8.1	Continuous Internal Evaluation  For a pass in all the courses, the student shall secure a minimum of 40% of the maximum marks prescribed in the Semester End Examination and 50% of marks in CIE and 50 % in the aggregate of CIE and SEE marks. The Minimum Passing Grade in a course is C.
22OMB8.2	CIE Marks shall be based on  (a)Tests (for 25 Marks) and  (b)Assignments, Quiz, Simulation, Experimentation, Mini project, oral examination, field work etc., (for 25 Marks) conducted in respective courses. Course teachers are given autonomy in choosing a few or all of the above yardsticks in testing the students, however the chosen yardstick must be relevant to the subject and a record of all such things is to be kept by the course teachers
22OMB8.3	The CIE marks in a theory course, for 25 marks, shall be based on the average of two tests covering the entire syllabus. An additional test may be conducted for the deserving students to provide an opportunity to improve their CIE Marks before the end of the semester. The decision to conduct an additional test may be taken by the concerned subject teacher and the HoD depending on the merit of the case/s. The CIE marks shall be the average of the marks scored in two tests.
22OMB8.4	The candidates shall write the Tests in Blue Book/s. The Blue book/s and other documents relating to award of CIE marks under 22OMB8.2 (b) shall be preserved by the Principal / Head of the Department for at least six months from the date of announcement of University results and made available for verification at the directions of the Registrar (Evaluation).
22OMB8.5	Every page of the CIE marks list shall bear the signatures of the concerned Teacher, Head of the Department and the Principal.
22OMB8.6	The CIE marks list shall be displayed on the Notice Board and corrections, if any, shall be incorporated before submitting to the University.

#### 22OMB6.1

- (i) The University adopts an absolute grading system wherein the marks are converted to grades, and every semester's results will be declared with semester grade point average (SGPA) and Cumulative Grade Point Average (CGPA). The CGPA will be calculated for every semester, except for the first semester.
- (ii) The grading system with the letter grades and the assigned range of marks under the absolute grading system are as given below:

Letter G	rade and cor	respondin	g Grade Po	ints on a	typical 10 -	- Point sc	ale
Letter Grade	0	<b>A</b> +	A	B+	В	C	F
	Outstanding	Excellent	Very Good	Good	Average	Pass	Fail
Grade Point	10	9	8	7	6	5	0
% of Marks secured	90-100	80-89	70-79	60-69	55-59	50-54	0-49

(iii)Minimum marks to score for CIE is 50% of the maximum marks of CIE, and the minimum passing marks for SEE is 40% of the maximum marks of SEE. In aggregate, the students have to secure 50% total marks of the course (CIE+SEE marks).

(iv) A student obtaining a Grade F in a Course shall be considered fail and is required to reappear in subsequent SEE. Whatever the letter grade secured by the student during his /her reappearance shall be retained. However, the number of attempts taken to clear a Course shall be indicated in the grade cards/ transcripts.



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22OMB5.8	(a) Viva-voce examination of the candidate shall be conducted as per 220MB5.10, if the
2201115.6	dissertation work and the reports are accepted by the external examiner (first).  (b) If the external examiner (first) finds that the dissertation work and the report are not up to the expected standard and the minimum passing marks cannot be awarded, the dissertation
	shall not be accepted for SEE.  The external examiner (first) can recommend modifications/suggestions of the dissertation or totally reject the dissertation. The examiner shall offer suggestions for improvement of the dissertation for resubmission or list the reasons for rejection of the dissertation.  (c) The resubmitted Dissertation incorporating the modifications/suggestions [as per
	22OMB5.8 (b)] of the external examiner (first) and satisfying the provision 22OMB5.3 shall be sent again to the external examiner (first) for evaluation. If the dissertation and the report
22OMB5.8 (continued)	are accepted by the external examiner (first), Viva-voce examination of the candidate shall be conducted as per 22OMB5.10.  (d) In case of rejection of Dissertation by the external examiner (first), the same will be sent to a Second Examiner (external) approved by the University. The decision of the Second Examiner (external) is final. If the dissertation and the report are accepted by the Second Examiner (external), Viva-voce examination of the candidate shall be conducted as per 22OMB5.10. If the Second Examiner (external) rejects the dissertation and the report, the candidate shall have to carry out the dissertation work once again and submit the dissertation subject to provisions of 22OMB1.4. In such cases of rejection, the candidate shall redo the entire procedure starting from the submission of Dissertation in soft copy. (e) In case of rejection of Dissertation, with reasons, by the external examiner (first) [as per22OMB5.8 (b)], the same will be sent to a Second Examiner (external) [not necessarily the same examiner considered under 22OMB5.8 (d)] approved by the University. The decision of the Second Examiner (external) is final. If the dissertation and the report are accepted by the Second Examiner (external), Viva-voce examination of the candidate shall be conducted as per 22OMB5.10. If the Second Examiner (external) rejects the dissertation and the report, the candidate shall have to carry out the dissertation work once again and submit the
di .	dissertation subject to provisions of 22OMB1.4. In such cases of rejection, the candidate shall redo the entire procedure starting from the submission of Dissertation in soft copy.
22OMB5.9	The candidate, whose Dissertation is rejected, can rework on the same topic or choose another topic of dissertation under the same Guide or new Guide if necessary. In such an event, the report shall be submitted within four years from the date of admission to the Programme.
22OMB5.10	Viva-voce examination of the candidate shall be conducted by the external examiner and internal examiner/guide.  Internal examiner as per the direction of the University shall have to arrive at a mutually convenient date for the conduct of viva-voce examination of the concerned candidate with an intimation to the Registrar (Evaluation). In case one of the examiners expresses his/her inability to attend the viva-voce, the Registrar (Evaluation) shall appoint a substitute examiner in his/her place.
22OMB5.11	The relative weights for the evaluation of the dissertation and the performance at the viva voce shall be as per the scheme of teaching & examination. ■
22OMB5.12	The marks awarded by both the Examiners at the viva voce Examination shall be sent jointly to the University immediately after the examination.
22OMB5.13	Examination fee as fixed from time to time by the University for evaluation of dissertation report and conduct of viva voce shall be remitted through the Head of the Institution as per the instructions of the Registrar (Evaluation) from time to time.
22OMB5.14	The candidates who fail to submit the dissertation work within the stipulated time have to submit the same at the time of the next ensuing examination.
22OMB6.0	Computation of SGPA and CGPA
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22OMB5.1	Project work and Dissertation:  Each candidate shall carry out the mandatory project work independently as per Scheme of Teaching and Examinations under the guidance of one of the faculty members of the Department in the Institution of study. If the project is of inter-disciplinary nature, a coguide shall be taken from the other concerned department.
22OMB5.1	The topic and title of the dissertation shall be chosen by the candidate in consultation with
(continued)	the guide and co-guide, if any, during the III semester itself.  The subject and topic of the dissertation shall be from the major field of study of the candidate. Modification of only the title but not the field of work may be permitted at the time of the final submission of the dissertation report during the IV semester. If the dissertation has to be carried out in any industry/R&D labs/business Organisations, outside the campus, permission shall be taken from the Principal to that effect.  The Principal, shall submit a list showing the name of the student, University Seat Number, the title of the project, name/s of the guide/co-guide at the time of submission of project report to the University.
22OMB5.2	The project is one of the heads of passing.
220MB3.2	The candidate shall submit a soft copy (CD) of the dissertation work to the University. The CD should contain the entire Dissertation in monolithic form as a PDF file (not separate
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	chapters).  The Guide, after checking the report for completeness shall upload the Dissertation along with the name, University Seat Number, address, mobile number of the candidate, etc., as prescribed in the form available on online Dissertation evaluation portal.
22OMB5.3	Plagiarism Check Once the Guide uploads the dissertation, the same shall be linked for plagiarism check. The allowable plagiarism index is less than or equal to 25%. If the check indicates a plagiarism index greater than 25%: (i) for the first time, the candidate has to resubmit the dissertation, to the Registrar (Evaluation), Regional Center/Head Office, VTU along with the penal fees of (ii) Rs. 2000/- (Rupees Two thousand only). (iii) for the second time, the candidate has to resubmit the dissertation along with the penal fees of Rs. 4000/- (Rupees four thousand only). (iv) If the dissertation is rejected again during the second resubmission with reference to the
	plagiarism index, the candidate shall redo the project and submit it after a semester's time subject to provisions of 220MB1.4.
22OMB5.4	The dissertation shall be sent through email for evaluation to two examiners - one internal examiner (guide/co-guide) and one external examiner (first) appointed by the University. The evaluation of the dissertation shall be made independently by each examiner.
22OMB5.5	Examiners shall evaluate the dissertation normally within a period of not more than two weeks from the date of receipt of the dissertation through email.
22OMB5.6	The examiners shall independently submit the marks through the specified link. ■
22OMB5.7	The average of the marks awarded by the two Examiners shall be the final evaluation marks for the Dissertation.

22OMB3.3	Students shall be allowed to choose the elective/s, depending on their career plans, and there shall not be any restriction as regards the minimum number of students to be registered for an elective course.
22OMB4.0	Internship
22OMB4.1	Internship: The student shall undergo mandatory Internship/Organisation study as per the Scheme of Teaching and Examination.  (1) The internship shall be carried out in any industry/R&D Organisation/Research
	Institute/Institute of national and international repute Business Organisation/ recognized national and international Professional Bodies, Societies or Organisations.  (2) The Department/college shall nominate a faculty to facilitate, guide and supervise
	students under internship.  (3) The students shall report the progress of the internship to the internal guide in regular
	intervals and seek his/her advise.  (4) The Internship shall be completed during the period specified in Scheme of Teaching and Examination.
	<ul> <li>(5) After completion of Internship, students shall submit a report to the Head of the Department with the approval of both internal and external guides.</li> <li>(6) There will be 50 marks for CIE (Seminar: 20, Internship/ Organisation study report: 20)</li> </ul>
	and 60 marks for Viva – Voce conducted during SEE. [To be read along with 22OMB 8.1 and 9.3]
	<ul> <li>(7) The internal guide shall award the CIE marks for the seminar and internship reports after evaluation. He/she will also be the internal examiner for Viva – Voce conducted during SEE.</li> <li>(8) The external guide/ examiner will be from the industry/ faculty from the other PG centers of VTU as an examiner for the viva voce of Internship at VTU PG Centres. The affiliated</li> </ul>
	institutions can have the external guide/ examiner from the industry/ faculty from other VTU affiliated institutions/ VTU PG Centres. Viva-Voce on internship shall be conducted at the college and the date of Viva-Voce shall be fixed in consultation with the external Guide/ examnier. The Examiners shall jointly award the Viva - Voce marks.
	(9) (i) In case the external Guide/examiner is not available or expresses his inability to conduct viva voce, the Chief Superintendent shall be permitted to make alternate arrangement. The examiner, in the order of preference, shall be an industry person or a faculty of another institution chosen from the list of University examiners. The same shall
	be intimated to the concerned BOE Chairperson.  (ii) In case the external Guide/ examiner accepts to conduct viva-voce examination from his/her workplace, it shall be arranged via Video/web conferencing/Webinar. The external
	Examiner shall send the signed marks list, soon after the examination, via email/any electronic media.
	(10) The students are permitted to carry out the internship anywhere in India or abroad. The University will not provide any kind of Financial Assistance to any student for internship.
22OMB4.2	Failing to undergo Internship: Internship is one of the head of passing. Completion of Internship is mandatory. If any student fails to undergo/complete the Internship, he/she shall be considered as fail in that Course and the prescribed credits shall not be awarded in that
61	Course. The student, however, can submit the project dissertation and appear for viva voce. The student shall be eligible for the internship credits only after satisfying the conditions prescribed for the same during the subsequent academic year. The reappearance shall be considered an attempt.
22OMB5.0	Project
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	(i) The candidates from Universities other than the Universities of Karnataka shall have to obtain Eligibility Certificate from the VTU to seek admission to MBA program in any of the college affiliated to VTU.  (ii) The candidates from foreign countries shall have to obtain Eligibility Certificate from the VTU to seek admission to MBA program in any of the colleges affiliated to VTU. Further, they have to produce an equivalence certificate from the Association of Indian Universities.
22OMB2.4	The intake under various categories (regular, SC/ST and category I) shall be as sanctioned by the AICTE, State Government and VTU, from time to time. ■
22OMB2.5	Admission to vacant seats:  Seats remaining vacant (unfilled), after the completion of PG admission process by Karnataka Examination Authority, shall be filled by the Institution by inviting applications through Press notification. The seats shall be filled by Candidates preferably who have PGCET score. In the absence of such Candidates, admission shall be based on merit in the entrance test conducted at the Institution level. An Admissions Committee, consisting of the Principal of the College, the Head of the concerned Department, Chairperson and the subject experts, shall be in charge of admissions.
22OMB3.0	Courses
22OMB3.1	The curriculum of the Programme shall be any combination of the following type of courses:  (i) Professional Core Courses (PC) - relevant to the chosen specialization/ branch [May be split into Hard (no choice) and Soft (with choice), if required]. The core course is to be compulsorily studied by a student and is mandatory to complete the requirements of a programme in a said discipline of study.  (ii) Professional Electives Courses (PE) - relevant to the chosen specialization/ branch: these are the courses, which can be chosen from the pool of papers. It shall be supportive to the discipline/ providing extended scope/enabling an exposure to some other discipline / domain / nurturing student skills.  (iii) Open Electives Courses (OE) - from other technical and/ or emerging specialization areas.  (iv) Project Work, Seminar.  (v) Audit Courses (AC)/ Skill Enhancement Course (SEC)- The Audit course can be any non-credit course offered by the program to which the Candidate is admitted (other than the courses considered for completing the prescribed program credits).  Audit course/s are non-credit courses opted by students for self – enrichment. Though, the CIE and SEE are not required, the attendance to be compulsorily satisfied, for the audit course/s to find a place in the grade card without the mention of letter grade and credit.  (vi) Professional training/Internship Preferably at an industry/ R and D Organisation /IT company/ Government Organisation /Business Organisation of significant repute for a specified period mentioned in Scheme of Teaching and Examination.
22OMB3.2	A candidate shall exercise his /her option in respect of the electives and register for the same before the beginning of the concerned semester. The candidate may be permitted to opt for

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Title, Duration, and Credits of the Programme of Study
Title  The Program shall be called Master of Business Administration (Subject of Specialization) abbreviated as MBA (Subject of Specialization). ■
Minimum Duration  The Programme shall be a full-time program extended over a period of two academic years duration divided into four semesters and each semester shall be of 16 weeks in duration.
A Faculty/ Employee working on Full Time basis in an Institution/ Organization and pursuing/pursuing any Full-Time Course for the same duration as that of Regular Shift shall be considered as ineligible for the purpose of employment/ higher studies.
Maximum Duration for Programme Completion:  A candidate shall be allowed a maximum duration of 4 years from the first semester of admission to become eligible for the award of the Degree, failing which he/she may discontinue the program or register once again as a fresh candidate to I semester.
Prescribed Number of Credits for the Programme:  The number of credits to be completed for the award of the degree shall be 100. ■
Definition of Credits:  01-hour Lecture (L) per week per semester = 1 Credit  02-hour Tutorial (T) per week per semester = 1 Credit  02 hours of Practical/Laboratory/Drawing (P) per week per semester = 1 Credit.  Note:  (i) Four credit Courses are designed for 50 hours Teaching – Learning process.  (ii) Three credit Courses are designed for 40 hours Teaching – Learning process.
The Calendar of events in respect of the Programme shall be notified by the University in advance.
Eligibility for Admission (As per the Government orders issued from time to time)
Admission to MBA Program shall be open to the candidates who have passed a recognized Bachelor's Degree of a minimum of 03 years duration or equivalent examination and obtained an aggregate minimum of 50% marks taken together in all the subjects including languages in all the years of the Degree Examination and 45% of marks in case of SC, ST and Category-I of Karnataka candidates. (Reservation is applicable only for Karnataka Candidates).
For admissions under PGCET qualification and Roaster system of the Government of Karnataka:  There shall be an Entrance Examination (PGCET) for admission to the MBA programme. A candidate seeking admission to MBA Programme offered in any of the Engineering Colleges affiliated to VTU shall appear for this Examination. For admission under Government quota, ranks obtained in PGCET entrance examination, conducted by Karnataka Examination Authority (KEA), shall be considered.  For admissions under Management Quota:  The candidates should have appeared for the Entrance Examination conducted by KEA (PGCET)/Karnataka Management Aptitude Test (KMAT) or appeared and qualified under any approved entrance examination conducted by the authority recognized by the Government of Karnataka/VTU /the any other University of Karnataka state.  Further, there shall be an Admissions Committee for the MBA Program consisting of the Principal of the College as the Chairman, the Head of the concerned Department/Chairperson

- (21) Semester Grade Point Average (SGPA): Refers to a measure of academic performance of student/s in a semester. It is the ratio of total credit points secured by a student in various Courses of a semester and the total Course credits taken during that semester. [Refer to22OMB6.0]
- (22) Cumulative Grade Point Average (CGPA): This is a measure of the overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points earned by a student in various Courses in all semesters and the sum of the total credits of all Courses in all semesters. It is expressed up to two decimal places. [Refer to 220MB6.0]
- (23) Grade Card: Refers to a certificate showing the grades earned by a student. A grade card shall be issued to all the registered students after every semester. The grade card will display the program details (Course code, title, number of credits, grades secured) along with the SGPA of that semester and CGPA earned till that semester.

(24) University: Visvesvaraya Technological University (VTU), Belagavi.

#### Visvesvaraya Technological University, Belagavi Regulations Governing the Degree of MBA

# Under Outcome Based Education (OBE) and Choice Based Credit System (CBCS) Scheme Effective from academic year 2022 -23

- (14) Credit Based System (CBS): Refers to quantification of Course work, after a student completes teaching learning process, followed by passing in both CIE and SEE. Under CBS, the requirement for awarding degree is prescribed in terms of total number of credits to be earned by the students.
- (15) Credit Representation: Refers to Credit Values for different academic activities considered, as per the Table.1. Credits for seminar, project phases, project viva—voce and internship shall be as specified in the Scheme of Teaching and Examination.
- (16) Letter Grade: It is an index of the performance of students in a said Course. Grades are denoted by letters O, A+, A, B+, B, C, and F.

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

NOTE: Activities like, practical training, study tour and participation in Guest lectures not to carry Credits.

- (17) Grading: Grade refers to qualitative measure of achievement of a student in each Course, based on the percentage of marks secured in (CIE plus SEE). Grading is done by Absolute Grading [Refer to 220MB6.0]. The rubric attached to letter grades are as follows:
- O Outstanding, A + Excellent, A- Very Good, B+- Good, B Average, C Pass and F Fail.
- (18) Grade Point (GP): Refers to a numerical weightage allotted to each letter grade on a 10-point scale as under.

Letter Grac	le and corr	esponding	Grade Po	oints on a t	typical 10	<ul> <li>Point sc.</li> </ul>	ale
Letter Grade	0	A+	Α	B+	В	С	F
Grade Point	10	09	08	07	06	05	00

(19) Passing Standards: Refers to passing a Course only when getting GP greater than or equal to 04 (as per serial number 18).

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing marks for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements (passed) and earned the credits allotted to each course if the student secures not less than 50% in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.

(20) Credit Point: Is the product of grade point (GP) and number of credits for a Course i.e., Credit points (CrP) = GP × Credits for the Course

**Definitions of Keywords** 

The following are the definitions/descriptions that have been followed for the different terms used in the Regulations of MBA Program:

- (1) Programme: Is an educational programme in Masters of Business Administration leading to award of Degree. It involves events/activities, comprising of lectures/ tutorials/ laboratory work/ field work, outreach activities/ project work/ vocational training/ viva/ seminars/ Internship/ assignments/ presentations/ self-study etc., or a combination of some of these.
- (2) Branch: Means Specialization or discipline
- (3) Semester: Refers to one of the two sessions of an academic year (vide: serial number 4), each session being of sixteen weeks duration (with working days greater than or equal to ninety days). The odd semester may be scheduled from August and even semester from February of the year.
- (4) Academic Year: Refers to the sessions of two consecutive semesters (odd followed by an even) including periods of vacation.
- (5) Course: Refers to subjects/papers of a programme. All Courses need not carry the same weight. The Courses should define learning objectives and learning outcomes. A Course may be designed to comprise lectures/ tutorials/ laboratory work/ field work/ outreach activities/project work/ vocational training/ viva/ 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/ fieldwork per week etc.
- (7) Audit Courses: Means Knowledge/ Skill enhancing Courses without the benefit of a grade or credit for a Course.
- (8) Choice Based Credit System (CBCS): Refers to customizing the Course work, through Core, Elective and soft skill Courses, to provide necessary support for the students to achieve their goals.
- (9) Course Registration: Refers to formal registration for the Courses of a semester (Credits) by every student under the supervision of a Faculty Advisor (also called Mentor, Counselor etc.,) in each Semester for the Institution to maintain proper record.
- (10) Course Evaluation: Means Continuous Internal Evaluation (CIE) and Semester End Examinations (SEE) to constitute the major evaluations prescribed for each Course. CIE and SEE to shall carry 50 % each, to enable each Course to be evaluated for 100 marks, irrespective of its Credits.
- (11) Continuous Internal Evaluation (CIE): Refers to evaluation of students' achievement/progress in the learning process. CIE shall be done by the Course Instructor and includes tests, homework, problem solving, group discussion, quiz, mini-project and seminar throughout the Semester, with weightage for the different components being fixed at the University level.
- (12) Semester end examinations (SEE): Refers to examination conducted at the University level covering the entire Course Syllabus. For this purpose, Syllabi is to be modularized and SEE questions are to be set from each module. SEE is also termed as university examination.
- (13) First Attempt: Refers to a student who has completed all formalities and has become eligible to attend the SEE and has attended at least one head of passing, such attempt shall be considered as first attempt.