Dr.T. THIMMAIAH INSTITUTE OF TECHNOLOGY



(Estd. 1986) Oorgaum, Kolar Gold Fields, Karnataka – 563120 (Affiliated to VTU, Belgaum, Approved by AICTE - New Delhi)

 ${\bf 1.2.1\ Percentage\ of\ programs\ in\ which\ Choice\ Based\ Credit\ System\ CBCS)/elective\ course}$ system has been implemented.

INDEX FILE for Implementation of CBCS System

Sl No	Contents	Page No
1	2015 CBCS System VTU Circular	1
2	2015 Scheme Regulations	2-17
3	2017 Scheme Regulations	18-39
4	2018 VTU Circular	40
5	2018 Scheme Regulations	41-58

Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018

REGISTRAR

Phone: (0831) 2405468 Fax : (0831) 2405467

Ref. No. VTU/Aca/A6/2014-15//379

Date: 2 5 MAY 2015

CIRCULAR

This is to bring to the notice of the Principals of affiliated Engineering colleges that,

"As per the directions of University Grants Commission, New Delhi, the Choice Based Credit System (CBCS) will be introduced for B.E./B.Tech. Programs from the academic year 2015-16. In light of this it is decided to retain 2010 syllabus to the students admitted to B.E./B.Tech. during the academic year 2014-15".

Hence, the students who are admitted to:

- 1. FIRST Semester B.E./B.Tech. during the academic year 2014-15 will study the 2010 scheme and syllabus from III to VIII Semesters without any modification,
- 2. THIRD Semester B.E./B.Tech. (Lateral Entry) during the academic year 2015-16 will study the 2010 scheme and syllabus from III to VIII Semesters without any modification, and
- 3. The Question Paper Pattern (answering 5 out of 8 questions) will remain the same as that of the 2010 scheme.

The Principals of affiliated Engineering Colleges are requested to bring the contents of this effcular to the notice of all the concerned.

PRINCIPAL PRINCIPAL Institute of Technology

Sd/-REGISTRAR

(Dr. K. E. Prakash)

To, The Principals of affiliated Engineering colleges.

Copy FWCs to:

1. The Registrar (Evaluation), VTU Belgaum, for information and needful.

2. The Special Officers of VTU Regional Offices, for information.

3. The Special Officer, Academic Section, VTU, for information.

4. The Secretary to VC, VTU Belgaum, for information.

REGISTRAR

(Dr.K.E.Prakash)

CHOICE BASED CREDIT SYSTEM (CBCS) REGULATIONS GOVERNING THE DEGREE OF BACHELOR OF ENGINEERING / TECHNOLOGY (B.E./B.Tech.)

DEFINITIONS OF KEY WORDS:

- 1. University: Visvesvaraya Technological University, Belagavi.
- **2. Academic Year:** Two consecutive (one odd + one even) semesters constitute one academic year.
- **3. Semester:** Each semester will consist of 15-18 weeks of academic work equivalent to 90 actual teaching days. The odd semester may be scheduled from August to January and even semester from February to July.
- **4.** Choice Based Credit System (CBCS): The CBCS provides choice for students to select from the prescribed courses (core, elective and Foundation Courses).
- **5. Credit Based Semester System (CBSS):** Under the CBSS, the requirement for awarding a degree or certificate is prescribed in terms of number of credits to be earned by the students.
- **6. Programme:** An educational programme leading to award of a Degree or certificate.
- 7. Course: Usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weightage. The courses should define learning objectives and learning outcomes. A course may be designed to comprise lectures/tutorials/laboratory work/ field work/ outreach activities/project work/vocational training/viva/seminars/term papers/assignments/presentations/self-study etc. or a combination of some of these.
- **8. Branch:** Specialization or discipline of B.E./B.Tech. Degree Programme, like Civil Engineering, Textile Engineering, etc.
- **9. Letter Grade:** 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.
- **10. Grade Point:** It is a numerical weightage allotted to each letter grade on a 10-point scale.
- **11. Credit:** 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 teaching (lecture or tutorial) or two hours of practical work/field work per week.
- **12. Credit Point:** It is the product of grade point and number of credits for a course.
- 13. Semester Grade Point Average (SGPA): It is 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 registered in a semester and the total course credits

- taken during that semester. It shall be expressed up to two decimal places.
- **14.** Cumulative Grade Point Average (CGPA): It is a measure of 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 the semesters. It is expressed up to two decimal places.
- **15. First Attempt:** If a student has completed all formalities and become eligible to attend the examinations and has attended at least one head of passing, such attempt (first sitting) shall be considered as first attempt.
- 16. Transcript or Grade Card or Certificate: Based on the grades earned, a grade certificate shall be issued to all the registered students after every semester. The grade certificate will display the course details (code, title, number of credits, grade secured) along with SGPA of that semester and CGPA earned till that semester.

Choice Based Credit System (CBCS): The CBCS provides choice for students to select from the prescribed courses.

Sequencing Plan for the B.E. / B.Tech. Degree Curriculum

Semesters	Course Coverage						
I –II	HSS, BS and ES; Common for all Branches;						
	Mandatory Courses						
III-IV	BS Common for all Branches and ES;						
	PS – Core/Elective						
V-VII	PS- Core & Electives; Other Electives;						
	Branch-wise Orientation						
VIII	PS-Electives/Elective; Other Electives,						
	Internship, Project work						

Abbreviations:

HSS - Humanities and Social Sciences

BS - Basic Sciences

ES - Engineering Sciences

PS - Professional Subjects

Credit Structure for Course Work

Lectures	Tutorial	Lab. Work	Credits	Credits
(hrs/wk	(hrs/wk/	(hrs/wk/Sem)	(Lec:instruction:Lab)	(Total)
/Sem)	Sem)			
4	0	0	4:0:0	4
3	0	0	3:0:0	3
0	1	2	0:1:2	2

CHOICE BASED CREDIT SYSTEM (CBCS) REGULATIONS GOVERNING THE DEGREE OF BACHELOR OF ENGINEERING / TECHNOLOGY (B.E./B.Tech.)

(B.E./B.Tech.)					
150B 1	TITLE AND DURATION OF THE PROGRAMME OF STUDY				
150B 1.1	The program of study shall be called the degree Program of study in				
	Bachelor of Engineering / Technology, abbreviated as B.E. / B.Tech.				
150B 1.2	The program shall be of four academic years duration divided into				
	eight semesters, each semester having duration of 16 weeks. For				
	evening courses the contact hours are to be satisfied by working extra				
	on afternoons of Saturdays and Sundays.				
150B 1.3	The calendar of events in respect of the program of study shall be				
	fixed by the University from time to time.				
150B 1.4	The examination in all programs of study shall be conducted at the				
	end of each semester for all eight semesters.				
15OB 2	ELIGIBILITY FOR ADMISSION				
	(The Government orders issued from time to time in this regard shall				
	prevail).				
15OB 2.1	Admission to I year / I semester Bachelor Degree in Engineering /				
	Technology shall be open to the students who have passed the second				
	year Pre-University or XII standard or equivalent examination				
	recognized by the University.				
	For the prerequisite qualification earned from foreign countries,				
	Equivalence certificate from the Association of Indian Universities is				
	Mandatory.				
	The decision of the Equivalence committee shall be final in				
150000	establishing the eligibility of student.				
15OB 2.2	In addition to 150B 2.1, the student shall have secured not less than				
	forty five percent (45%) marks in the aggregate with Physics and				
	Mathematics as compulsory subjects, along with any one of the				
	following subjects, namely, Chemistry, Bio-Technology, Computer				
	Science, Biology and Electronics or as decided by the Government of Karnataka.				
	Provided that, the minimum marks for the purpose of eligibility shall				
	be forty percent (40%) in optional subjects in case of students				
	belonging to SC/ST and OBC students from Karnataka or as decided				
	by the Government of Karnataka.				
	Provided further that, the student shall have studied and passed				
	English as one of the subjects.				
15OB 2.3	Admission to II year/ III semester Bachelor Degree in Engineering/				
1001 2.0	Technology (Lateral Entry) shall be open to the students				
	Diploma Holders				
	Must have passed diploma or equivalent qualification as				
	recognized by University and secured not less than forty five				
	percentage (45%) marks in the final year examination (fifth and				
	10- () () ()				

- sixth semesters) in the appropriate branch of engineering. In case of SC/ST and OBC students from Karnataka the minimum marks for eligibility shall be forty percent (40%).
- Who have completed their Diploma from other than Karnataka state shall provide the Equivalence/ Eligibility Certificate from the Director of Technical Education, Karnataka.
- Who are seeking admission under lateral entry shall also clear prescribed Bridge courses (Advanced Mathematics – III and IV) and Mandatory subjects (CPH and CIV) as specified by the University.

B.Sc. Graduates

- **Must have** passed B.Sc. degree from a recognized University as defined by the UGC or equivalent qualification as recognized by University and secured not less than forty five percentage (45%) marks in aggregate (including all six semesters). In case of SC/ST and OBC students from Karnataka the minimum marks for eligibility shall be forty percent (40%). Should have studied Mathematics as subject of study at XII Standard.
- Further, all the B.Sc. students seeking admission to lateral entry shall also clear the following subjects before entering into V Semester
 - I. Computer Aided Engineering Drawing (CAED) and
 - II. Programming in C and Data Structures
 - III. CPH and CIV (if not studied at B.Sc. Level).

150B 2.4

Admission to Evening Programme of study shall be open to a student Who on the first day of the term notified by the University for the year of admission has at least one-year professional experience in the branch of engineering / technology, in which the student holds a diploma.

Explanation: Professional experience means employment on regular basis

- a. in Government, Government undertaking, Public Sector undertaking, Corporations or
- b. in a private company registered under the Directorate of Industries and Commerce or the Directorate of Small Scale Industries or
- c. In Government, Government recognized institutions as technical staff.

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 any Government, Government undertaking or Public Sector undertaking. Provided further that employment shall be in an establishment situated within the urban agglomeration of city in which the professional institution is situated.

150B 2.5

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 B.E./B.Tech. Degree Programme from Visvesvaraya Technological
	University, Belagavi or from the Principal of concerned Engineering
1505.0	College of Karnataka State.
15OB 3	ATTENDANCE REQUIREMENT
150B 3.1	Each semester is considered as a unit and the student has 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 recommendation of the Principal of the college where the
	student is studying, showing reasonable cause such as medical
	grounds, participation in University level sports, cultural activities,
	seminars, workshops, paper presentation, etc.
150B 3.2	The basis for the calculation of the attendance shall be the number of
	hours prescribed by the University by its calendar of events. For the
	first semester students, the same shall be reckoned from the date of
1705.00	admission to the course as per CET allotment.
150B 3.3	The students shall be informed about their attendance status
	periodically by the colleges so that the students shall be cautioned to
	make up the shortage. The Principals of the affiliated Colleges shall
	submit the list of students who have been detained for shortage of
	attendance by the end of the semester to the Registrar (Evaluation)
	with a copy to the Registrar.
	Provided that mere omission by the college to inform the student
	about the shortage of attendance shall not entitle him to appear for
1500.04	examination.
150B 3.4	A student having shortage of attendance in one or more subjects shall
	have to repeat the whole semester and such students shall not be
	permitted to take admission to next higher semester.
	Such students shall take readmission to the same semester in the
1500.05	subsequent academic year.
150B 3.5	TEMPORARY DISCONTINUATION OF THE PROGRAM:
	A student, who wishes to temporarily discontinue the program and
	continue the same subsequently, has to obtain prior permission from
	the University by applying through the Principal. Such students have
	to take readmission to the same semester/year in the subsequent
	academic year. However, the student shall complete the course as per
150B 4	150B 6.2. INTERNAL ASSESSMENT MARKS
150B 4 150B 4.1	There shall be a maximum of 20 Internal Assessment Marks in each
1308 4.1	
	theory or practical paper. For seminars, the Internal Assessment
	marks shall be 50.

150B 4.2	The Internal Assessment marks in a theory paper shall be based on
1305 4.2	two tests generally conducted at the end of 6 th and 12 th week of each
	semester. An additional test may be conducted for the desirous
	students before the end of the semester to give an opportunity to such
	students to improve their Internal Assessment Marks, subject to the
	provisions of 150B 4.13. The test shall be answered in Blue Books
	with pages serially numbered. These blue books shall be kept in the
	custody of the Principal of the College until after one month from the
	date of announcement of the result by the University. These shall be
	made available to University authorities for verification as per the
	directions of the Registrar (Evaluation)/ Registrar.
15OB 4.3	Average of the better marks obtained from any two tests shall be the
	Internal Assessment Marks for the relevant subject.
150B 4.4	If a student remains absent for all the Internal Assessment tests
	conducted, the Internal Assessment Marks shall be marked as AB for
	the subject against the University Seat Number (USN) of the student in
	the marks sheet submitted to the University by the Principal of the
150B 4.5	College.
1508 4.5	In the case of a Practical, the IA marks shall be based on the laboratory journals/reports and one practical test.
150B 4.6	The IA marks for I year Computer Aided Engineering / Drawing:
1305 4.0	a) 12 marks for class work (sketching and Computer Aided
	engineering drawing).
	b) 08 marks for test in the same pattern as that of the main
	examination (better of the two tests)
	ii) The IA marks for other Drawings and Design Drawings offered by
	various branches shall be based on the evaluation of the sheets and
	one test in the ratio 60:40.
150B 4.7	The IA marks in the case of projects and seminars in the final year
	shall be based on the evaluation at the end of 8th semester by a
	committee consisting of the Head of the concerned Department and
	two senior faculty members of the Department, one of whom shall be
15OD 4 9	the project / seminar guide. The final list incorporating corrections (if any) of IA marks awarded to
150B 4.8	The final list, incorporating corrections (if any) of IA marks awarded to the students in the Theory/Practical/Internship/Project work/
	Seminar, shall be displayed on the notice board of the college at least
	seven days before the closure of the semester and a certified copy of
	the same shall be sent by the Principals to the University Examination
	Section within the stipulated date. Every page of the IA marks sheet
	shall bear the signatures of the concerned Teacher/Teachers, Head of
	the Department and Principal.
150B 4.9	Any corrections or over writing of IA marks shall bear the signature(s)
	of concerned Teacher(s) and in such cases the Head of the Department
	shall on every sheet indicate the number of corrections and attest it
	with his signature.

15OB 4.10	A student failing to secure a minimum of 50% of the IA marks in
(a)	Practical/Internship/Project work shall not be eligible for the Practical
	/Internship/Project of the University examination.
150B 4.10	
(b)	the maximum.
150B 4.11	Such students as mentioned in 150B 4.10 shall repeat the laboratory
	work/Internship/project work during the subsequent semester(s) and
	secure at least the minimum marks prescribed.
150B 4.12	
1000 1.12	IA marks.
15OR / 13	Improvement of IA marks shall not be allowed
1300 7.13	
	a. In theory subjects and
	b. In Laboratory/Workshop/Seminar/ Internship / Project where the
150D 4 14	student has already secured the minimum required marks.
150B 4.14	11 /
1505 115	sent separately to the Registrar (Evaluation).
150B 4.15	5
	examination as per the notification from the office of the Registrar
	(Evaluation) from time to time. After the submission of Internal
	Assessment marks to the University, any request for change of IA
	marks shall not be considered under any circumstances.
15OB 5	ELIGIBILITY FOR PASSING
	A student who obtained Grades O to E shall be considered as passed
	and if a student secured "F" grade in any of the head of passing he
	/she has to reappear for the examination.
150B 5.1	For a pass in a theory subject/drawing, the student shall secure
(a)	minimum of 35% of the maximum marks prescribed in the University
	examination and 40% of marks in the aggregate inclusive of the IA
	marks. i.e. Minimum Passing Grade is "E".
150B 5.1	For a pass in a Practical/Internship/Project/Viva-voce examination, a
(b)	student shall secure a minimum of 40% of the maximum marks
	prescribed for the University Examination in the relevant
	Practical/Internship/Project/Viva-voce. i.e. Minimum Passing Grade
	in a course is "E".
150B 5.1	For a pass in Seminar, a student shall secure a minimum of 40% of
(c)	the maximum marks prescribed. i.e. Minimum Passing Grade is "E".
150B 5.2	The students who do not satisfy the condition 150B 5.1 and the
	student who remains absent shall be deemed to have failed in that
	subject and may reappear for the University examination in the
	subsequent examinations. However, the IA marks awarded to the
	student/s at first attempt in the concerned theory subject will be
	carried forward. In case of Practical/Internship/Projects/Seminar
	revised marks will be taken as per regulations 150B 4.10 (a & b) and
	150B 4.11.
15OB 5.3	The student who passes a course of a semester as per 150B 5.1 shall
1000 0.0	The student who passes a course of a semicited as per 1000 3.1 shall

	not be allowed to appear for the same again, unless he/she opts for
OD 5 4	rejection of results as per 150B 5.4, 5.5, 5.6, 5.7 & 5.8.
OB 5.4	A student may, at his/her desire, reject his/her total performance of a
	semester (including IA marks) or he/she may reject the result of
	his/her performance in University examination of a semester only.
15OB 5.5	The rejection is permitted only once during the entire course of study. The student who desires to reject the performance as per 15OB 5.4
1306 3.3	shall reject performance in all the courses of the semester, irrespective
	of whether the student has passed or failed in any subject. However,
	the rejection of performance of 8th semester project result shall not be
	permitted.
150B 5.6	A student, who desires to reject the total performance of the semester
1002 0.0	including Internal Assessment, has to take readmission for the
	relevant semester. Application for such 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. Readmission to First
	semester in such cases shall not be considered as fresh admission i.e.,
	the student will continue to have the same University Seat Number,
	which was allotted earlier. The course duration permitted (as per
	150B 6) will be counted as per old USN.
OB 5.7	The student, who desires to reject only the results of University
	examination of a semester and does not desire readmission, shall be
	permitted to re-appear for examinations of all the subjects of the
	semester in the subsequent examinations. However, the IA marks
	obtained by the student in the rejected semester shall be retained.
	Applications for such rejection 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.
	If the rejection of the University examination results of the semester
	happens to be of the odd semester, the student shall be allowed to
	take admission to the immediate next even semester. However, if the
	rejection of the University result is of the even semester, the student
	shall not be allowed to take admission to the next odd semester (as per
	15OB 7.2).
150B 5.8	Such students who opt for rejection at final year are eligible for the
	award of class and distinction at the B.E./ B.Tech. degree level, but
	are not eligible for the award of ranks.
15OB 5.9	A student shall be declared to have completed the program of B.E. /
	B.Tech., degree, provided the student has undergone the stipulated
	course work as per the regulations and has earned at least 200
1505.6	Credits.
150B 6	MAXIMUM DURATION FOR COURSE COMPLETION
150B 6.1	A student who has not obtained the eligibility for third semester after a

150B 6.2	period of three academic years from the date of first admission shall discontinue the course. However, the student is eligible for readmission for first year B.E./B.Tech. in respective College of the University and he/ she shall be allotted a University Seat Number (USN) without any change in the year of admission in the USN but the serial number of the student shall start with six hundred (6XX) series in the same branch. The student admitted to 1st year B.E/ B.Tech. shall complete the course within a period of eight academic years from the date of first admission, failing which he/she has to discontinue the course. The students admitted under lateral entry scheme (2nd Year B.E./B.Tech.) shall complete the course within a period of six academic years from the date of first admission, failing which he/she has to discontinue the course.
15OB 7	PROMOTION AND ELIGIBILITY FOR THE EXAMINATIONS
150B 7.1	There shall not be any restriction for promotion from an odd semester to the next even semester, provided the student has fulfilled the attendance requirement.
150B 7.2	A student shall be eligible for promotion from an even semester to the next odd semester (i.e. of the next academic year) if the student has not failed in more than four heads of passing of the immediately preceding two semesters and has passed in all the subjects of all the lower semester examinations. A theory or practical shall be treated as a head of passing. Illustrations a. A student seeking eligibility to 3 rd semester should not have failed in more than 4 heads of passing of first and second semesters taken together. b. A student seeking eligibility to 5 th semester should have passed in all the subjects of 1 st and 2 nd semesters and should not have failed in more than 4 heads of passing of third and fourth semesters taken together. c. A student seeking eligibility to 7 th semester should have passed in all the subjects up to 4 th semester and should not have failed in more than 4 heads of passing of 5 th and 6 th semesters taken together.
	The Subjects: 1. Constitution of India, Professional Ethics and Human Rights, and 2. Environmental Studies are Mandatory Non-Credit Courses; these subjects shall not be considered for the Eligibility for promotion, award of Class, calculation of SGPA and CGPA. However, a pass in the above subjects is mandatory before the completion of Degree.
15OB 8	COURSES

15OB 8.1 15OB 8.2 15OB 8.3	(i) Core Courses: This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirements of a program in a said discipline of study. These courses will have 4 credits per course. (ii)Foundation Courses: The Foundation Courses are of two kinds: Compulsory Foundation and Elective foundation. "Compulsory Foundation": These courses are the courses based upon the content that leads to Knowledge enhancement. They are mandatory for all disciplines. These courses will have 4 credits per course. "Foundation Electives": These are value based courses aimed at man making education. These courses will have 3 credits per course. (iii)Elective Courses: This is course, which can be chosen from the pool of papers. It may be supportive to the discipline/ providing extended scope/enabling an exposure to some other discipline / domain / nurturing student proficiency skills. These courses will have 3 credits per course. (iv)Mandatory Non-Credit Courses: These courses are mandatory for students joining B.E./B.Tech. Program and students have to successfully complete these courses before the completion of degree. The minimum number of students to be registered for an Elective to be offered shall be not less than ten. A student shall exercise his option in respect of the electives and register for the same at the beginning of the concerned semester. The student may be permitted to opt for change of elective subject within 15 days from the date of commencement of the semester as per the
	calendar of the University.
15OB 9	INTERNSHIP
150B 9.1	 Internship: The student shall undergo an Internship for 8 weeks i.e. starting from the end of 7th semester Examination after availing one week vacation and completing during the initial period of 8th semester. 1. The college shall nominate a faculty for a group of students to prepare the students for internship. 2. The students shall report the progress of the internship to the guide in regular intervals and may seek his/her advise. 3. The Internship shall be completed between 7th and 8th semesters. 4. After completion of 7th semester Theory and Practical examinations, the students shall have one week vacation. 5. Immediately after availing one week vacation, the students shall undergo internship (without waiting for the results) which may be a period of 4/5 weeks.

- 6. The remaining period of internship; i.e. 4/3 weeks shall be completed during the initial period of the 8th semester.
- 7. After completion of Internship, students shall submit a report to the college with the approval of both internal and external guides.
- 8. There will be 50 IA and 50 External marks for Internship.
- 9. The guide shall be the internal examiner and IA marks out of 50 are to be awarded by the internal guide after evaluating the Internship Report submitted by the student.
- 10. 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.
- 11. Viva-Voce on internship shall be conducted by both internal and external guides and jointly evaluate the internship report for 50 marks. The expenses of external guide are to be borne by the student/college.
- 12. In case of the non availability of external guide for the conduct of viva-voce, the Principal shall appoint a senior faculty of the department to conduct viva-voce along with the internal guide, and they jointly evaluate the internship report for 50 marks.
- 13. The students are permitted to carry out the internship outside India with the following conditions:
 - a. The entire expenses are to be borne by the student or college and the University will not give any financial assistance.
 - b. The Internal Guide has to visit at least once during the student's internship; the expenses of the visit are to borne by the student/college.
 - c. The external guide from the industry has to be an examiner for the viva voce on Internship, and the expenses are to be borne by the student/ college.
 - d. The University will not provide any kind of Financial Assistance to any student for internship and for the conduct of Viva-Voce on internship.

15OB9.2	Report on Internship : The College shall facilitate and monitor the student internship program. The internship report of each student shall be submitted to the Head of the Department of the college with the approval of the Guide.									
15OB9.3	manda	Failing to undergo Internship: Completion of internship is mandatory; if any student fails to complete internship, he/she will not be eligible for the award of degree.								
15OB9.4		Non-completion of Internship : In such cases, the student has to redo the internship.								
150B 10	SEMII	NAR ANI	D PROJI	ECT						
150B 10.1	only.	ar topic								
150B 10.2	consis	t work a sting of n	ninimum	of two	studer	nts and	d maxim	um fou	r stu	dents.
150B 10.3	Viva-v	oce exan	nination	in proje	ct wor	k shal	l be con	ducted	batch	ı-wise.
150B 11	COME	PUTATIO	ON OF SO	GPA AN	D CGI	PA				
	ii.	converted to grades, and every semester results will be declared with semester grade point average (SGPA) and Cumulative Grade Point Average (CGPA). The CGPA will be calculated every semester, except the first semester. ii. The grading system is with the following letter grades as given below: Grades and Grade Points								
		Level	Out- standing	Excellent	Very Good	Good	Above Average	Average	Poor	Fail
		Letter Grade	0	s	A	В	С	D	E	F
	Grade 10 9 8 7 6 5 4 00 Points									
		A studer be requi- Such st examina marks h Number the trans	red to re udents a tion/s v e/she so of attem	appear in a saperation after particular and a saperation	in the ssing award the su	exami the fa ed wit bsequ	nation. ailed sul h "E" g ent exar	bject in grade ir mination	sub respe n/s.	sequent ctive of

Grade Points Scale

Level	Out- standing	Excellent	Very Good	Good	Above Average	Average	Poor	Fail
Letter Grade	Ο	S	A	В	С	D	E	F
Grade Points	10	9	8	7	6	5	4	00
Score (Marks) Range (%)	≥ 90	<90	< 80 ≥70	< 70 ≥60	< 60 ≥50	< 50 ≥45	<45 ≥40	< 40

Computation of SGPA and CGPA

The following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

SGPA (Si) =
$$\sum$$
(Ci x 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.

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

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

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

iii. The SGPA and CGPA shall be rounded off to 2 decimal places and reported in the transcripts.

Illustration for Computation of SGPA and CGPA

Computation of SGPA

Illustration No.1

Course	Credit	Grade letter	Grade point	Credit Point (Credit x Grade)
Course 1	4	A	8	4x8 = 32
Course 2	4	С	6	4x6 = 24
Course 3	4	В	7	4x7 = 28
Course 4	3	О	10	3x10= 30
Course 5	3	D	4	3x4 = 12
Course 6	3	С	6	3x6 = 18
Course 7	2	S	9	2x9 = 18
Course 8	2	С	6	2x6 = 12
	25			174

Thus, **SGPA= 174/25=6.96**

Illustration No.2

Course	Credit	Grade letter	Grade point	Credit Point (Credit x Grade)
Course 1	4	A	8	4x8 = 32
Course 2	4	С	6	4x6 = 24
Course 3	4	В	7	4x7 = 28
Course 4	3	О	10	3x10= 30
Course 5	3	F	0	3x0 = 00
Course 6	3	С	6	3x6 = 18
Course 7	2	S	9	2x9 = 18
Course 8	2	С	6	2x6 = 12
	25			162

Thus, **SGPA= 162/25=6.48**

Illustration No.2(a)

Course	Credit	Grade letter	Grade point	Credit Point (Credit x Grade)
Course 5	3	E	4	3x4 = 12
	25			Ci (First Attempt)162 + Ci (subsequent attempt) 12= 174

Thus, **SGPA= 174/25=6.96**

Illustration No.3

Course	Credit	Grade letter	Grade point	Credit Point (Credit x Grade)
Course 1	4	A	8	4x8 =32
Course 2	4	С	6	4x6 = 24

	0	1		77	1 4 7	00			
	Course 3	4	В О	7	4x7				
	Course 4			10		3x10=30			
	Course 5			9	3x9				
	Course 6	3	С	6	3x6				
	Course 7	2	S	9	2x9	=18			
	Course 8	2	C	6	2x6	=12			
		25				189			
	Thus, SGPA=	189/25=7	. 56						
	($CGPA = \frac{25x6.}{}$	$\frac{96 + 25x7.56}{50} =$	7.26					
		fter Final			<u> </u>	I			
		- 2 Sem. - 3			Sem 6 Credit : 24	Sem 7 Credit : 24	Sem 8 Credit : 26		
		8.5 SGPA:9.2			SGPA:7.73	SGPA:8.68	SGPA:9.4		
	Thus, CGPA=	24x7 + 24x8.5 +	27x9.2 + 27x6		+24x7.73+2	4x8.68 + 26x9.4	⁴ = 8.2		
	// // // // // // // // // // // // //	41. D		200		1 . 4	T - 44		
	Transcript (F	•							
	grades, grade	_				_			
	semester and		script in	uicating	the perior	mance in			
150B 12	all semesters i			DEDOEN	TTACE.				
150B 12				_		Donoontor	a ia		
	Conversion fo					_	e is		
	[CGPA Earned - 0.75] x 10= Percentage of marks scored.								
	Illustration:	CCDA For	ned 8.0 () 75l v 10	= 74 5%				
150B 13	AWARD OF P				- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1				
		<u> </u>			11.1		1 1 .1		
150B 13.1	For the award			•		-			
	Donor may be considered subject to the provisions of the statutes								
150D 10.0	framed by the University for such awards.								
150B 13.2	For award of ranks in a branch, a minimum of 10 students should								
	have appeared in the 8th semester examination. The total number of								
	ranks awarded shall be 10% of total number of students appeared in								
	8 th semester or 10 students, whichever is less in that branch. Illustration:								
	1. If 1028 students appeared for the 8th semester in Electronics								
	and Communication Engineering Branch, the number of ranks								
	to be awarded for Electronics and Communication Engineering will 10.								
	2. If 90 s	tudents o	nneared 1	or the S	Sth seme	ster in R	iomedical		
		ring Bran							
		cal Engine	•		1 IUIIIX	to be awa			
150B	For award of r				ing / Tec	hnology 1	he CGPA		
13.3	secured by the				6 / 100	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
10.0	a) 1st to 8			students	s admitte	ed to B.E	./B.Tech		
	•					D.D.	,		
	Program	from 1st y	ear, and						

	b) 3 rd to 8 th semester for the students admitted to B.E./B.Tech. Program from 2 nd year (Lateral Entry) shall be considered.
	A student shall be eligible for a rank at the time of award of degree in each branch of Engineering / Technology, provided the student
	a. Has passed 1 st to 8 th (students joining from 1 st semester) or 3 rd to 8 th (in case of lateral entry) semester in all the subjects in first attempt only
	b. Has not repeated/rejected any of the lower semesters.
150B	If two students get the same CGPA, the tie should be resolved by
13.4	considering the number of times a student has obtained higher SGPA;
	but, if it is not resolved even at this stage, the number of times a
	student has obtained higher grades like O, S, A, B etc shall be taken
1705.11	into account in rank ordering of the students in a program.
150B 14	TRANSFER OF STUDENTS
150B14.1	Transfer of students from one college to another college within
	Karnataka state shall be permitted only at the beginning of third, fifth,
	and seventh semesters, subject to availability of seats within the
	permitted intake in respective Colleges and subject to the prior
	approval of the University and the provisions of 150B 7.2. In the case of students from Universities other than VTU the students
	should have passed in all the courses of 1st & 2nd semesters for
	admission to 3 rd semester and all the courses of 1 st to 4 th semesters for
	admission to 5 th semester and all the courses of 1 st to 6 th semesters for admission to 7 th semester.
	The students seeking admission from Universities other than VTU
	shall have to
	a. apply for establishment of equivalence with prescribed fees as notified by the VTU and
	b. Obtain No Objection for admission from the university before
	commencement of term as notified by VTU.
150B14.2	Transfer of students within the College from one branch to another
	branch at 3 rd semester shall be permitted with the prior approval of
	the VTU and subject to the provisions made by the Government of
15OD14.2	Karnataka and AICTE in this behalf.
150B14.3	The University may prescribe fee for administrative purpose (for
	updating of the records), 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).
	i o anomor pranten (change of pranten within the contege).

NOTE: These regulations governing the Degree of Bachelor of Engineering/Technology of Visvesvaraya Technological University shall be binding on all and may be modified from time to time.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI- 590018



Approved B.E/B.Tech Governing Regulations

First Year Scheme & Syllabus as per Choice Based Credit System(CBCS) for 2017-18 admitted batch.

and

B.E/B.Tech Electronics & Communication Engineering 3rd to 8th Semester Scheme & Syllabus of 2017-18 Scheme (60:40) Pattern

Visvesvaraya Technological University, Belagavi



REGULATIONS GOVERNING

THE DEGREE OF BACHELOR OF ENGINEERING/ TECHNOLOGY (B.E/B.Tech) UNDER CHOICE BASED CREDIT SYSTEM (CBCS)

Effective from the academic year 2017 - 18

AUGUST2017

Visvesvaraya Technological University, Belagavi

REGULATIONS GOVERNING THE DEGREE OF BACHELOR OF ENGINEERING/ TECHNOLOGY (B.E/B.Tech) UNDER CHOICE BASED CREDIT SYSTEM (CBCS)

Effective from the academic year 2017 – 18

	CONTENTS	
Regulation	Title	Page
Clause		Number
	Definitions of Keywords	03
17OB 1.0	Title, Duration and Credits of the Programme of Study	06
17OB 2.0	Eligibility for Admission	07
17OB 3.0	Courses	08
17OB4.0	Internship/Professional Practice	09
17OB 5.0	Seminar and Project	10
17OB 6.0	Computation of SGPA and CGPA	11
17OB 7.0	Conversions of Grades into Percentage and Declaration of Class	13
17OB 8.0	Continuous Internal Evaluation	13
17OB 9.0	Eligibility for Passing and Award of Degree	15
17OB 10.0	Attendance Requirement	16
17OB 11.0	Promotion and Eligibility	17
17OB 12.0	Temporary Discontinuation/Break in the Program	18
17OB 13.0	Award of Prizes, Medals and Ranks	19
17OB 14.0	Transfers of Students	20
17OB 15.0	Applicability and Power to Modify	21
	Annexure -1 (Scheme of Teaching and Examination 2017 -18)	22

Visvesvaraya Technological University, Belagavi

REGULATIONS GOVERNING THE DEGREE OF BACHELOR OF ENGINEERING/ TECHNOLOGY (B.E/B.Tech) UNDER CHOICE BASED CREDIT SYSTEM (CBCS)

Effective from the academic year 2017 – 18

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. Programmes:

- 1) **Programme:** Is an educational programme in a particular stream/ branch of Engineering/branch of specialization 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.
- **Branch:** Means Specialization or discipline of B.E/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 semester may be scheduled from August and even semester from February of the year.
- **Academic Year:** Refers to the sessions of two consecutive semesters (odd followed by an even) including periods of vacation.
- **Course:** Refers to usually 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/ seminars/ term papers/assignments/ presentations/ self-study etc., or a combination of some of these.
- 6) **Credit:** Referstoa 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. **SEE** and CIE to carry 60% and 40% 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 weightage for the different components being fixed at the University level.

Visvesvaraya Technological University, Belagavi Regulations Governing the Degree of Bachelor of Engineering/ Technology (B.E/B.Tech) Under Choice Based Credit System (CBCS) (Effective from the academic year 2017 – 18)

- **Semester end examinations (SEE):** Refers to examination conducted at the University level 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 be considered 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 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 (Annexure -1).

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

- **16)** Letter Grade: 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 plus SEE). Grading is done by Absolute Grading [Refer: 170B6.0]. 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 B C D E 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.,

Credit Point (CrP) = $GP \times Credits$ for the Course

- 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:170B6.0]
- **Cumulative Grade Point Average (CGPA):** Is a measure of 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 the semesters. It is expressed up to two decimal places. [Refer: 17OB6.0]
- 23) Transcript or Grade Card or Certificate: Refers to a certificate showing the grades earned by a student. A grade certificate shall be issued to all the registered students after every semester. The grade certificate 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.



Visvesvaraya Technological University, Belagavi Regulations Governing the Degree of Bachelor of Engineering/ Technology (B.E/B.Tech.) Under Choice Based Credit System (CBCS)

(With effective from the academic year 2017 - 18)

17OB 1.0	Title, Duration and Credits of the Programme of Study						
17OB 1.1	The programme of study shall be called the degree of Bachelor of Engineering (Subject						
	of Specialization) /Bachelor of Technology (Subject of Specialization), abbreviated as						
	B.E. / B.Tech. (Subject of Specialization).						
17 OB1.2	The program to which students are admitted to I semester of the programme shall be of						
	four academic year duration divided into eight semesters and each semester is of 16 weeks duration.						
	The programme to which students are admitted to III semester of the programme under						
	lateral entry shall be of three academic year duration divided into six semesters and each semester is of 16 weeks duration.						
	The programme (conducted during evening) to which students are admitted to III						
	semester of the programme under lateral entry shall be of three academic year duration						
	divided into six semesters and each semester is of 16 weeks duration. The deficit						
	contact hours of the programme, conducted during evening on all working days, shall be compensated on all Sundays (except on general holidays).						
17 OB 1.3	The calendar of events in respect of the program of study shall be notified by the						
1, 02 1,0	University in advance.						
17 OB 1.4	The University examination in all programs of study shall be conducted at the end of						
	each semester for all the eight semesters.						
17 OB 1.5	Maximum Duration for Programme Completion:						
	a)						
	i. Students admitted to I year B.E/ B.Tech shall complete the programme						
	within a period of eight academic years from the date of first admission,						
	failing which they have to discontinue the Course. ii. Students admitted II Year B.E./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 Course.						
	b)						
	i. 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 but retaining the same						
	year of admission.						
	ii. A student (under lateral entry scheme) who has not obtained the eligibility						
	for V semester even after three academic years from the date of admission to						
	III semester shall discontinue the Programme or get readmitted to III						
	semester of II year B.E./B.Tech. with a new University Seat Number but						
17 OB 1.6	retaining the same year of admission. Prescribed Number of Credits for the Programme:						
17 00 1.0	(a) The number of credits to be completed by students admitted I semester of						
	B.E./B.Tech. programme shall be 200						
	(b) The number of credits to be completed by students admitted to III semester of						
	B.E./B.Tech. programme under lateral entry scheme shall be 152						

17 OB2.0	Eligibility for Admission(As per the Government orders issued from time to time)
17 OB2.1	Admission to I year/ I semester Bachelor Degree in Engineering/ shall be open to the students who have passed the II PUC/ XII 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. In case of SC/ST, Category -1 and OBC (2A, 2B, 3A and 3B) category students from Karnataka (Karnataka candidates) the minimum marks for eligibility shall be 40 %. With regard to the qualification earned from foreign countries, Equivalence certificate from the Association of Indian Universities is Mandatory for admission to B.E./B.Tech. programme. In case of any dispute about the equivalence in qualification earned from foreign countries, the decision of the Equivalence committee shall be the final in establishing the eligibility of the student. Admission to II year/ III semester Bachelor Degree in Engineering/ Technology (Lateral Extension of the II) when the Product of the Produc
	Entry) shall be open to the Diploma holders and B.Sc. graduates.
17 OB2.2	 (i) Diploma Holders (a) Must have passed diploma or equivalent examination as recognized by University and secured not less than forty five percentage (45%) marks in the final year examination (fifth and sixth semesters) in the appropriate branch of engineering. In case of SC/ST and OBC students from Karnataka the minimum marks for eligibility shall be forty percent (40%). (b) Those candidates who have completed Diploma from other than Karnataka state shall provide the Equivalence/ Eligibility Certificate from the Director of Technical Education, Karnataka. (ii) B.Sc. Graduates Must have passed B.Sc. degree from a recognized University under the UGC or equivalent qualification as recognized by University and secured not less than forty five percentage (45%) marks in aggregate (considering the marks of all six semesters). In case of SC/ST and OBC students from Karnataka (Karnataka candidates) the minimum marks for eligibility shall be forty percent (40%). Candidates must have studied Mathematics as subject of study at XII Standard.
	(i) Diploma Holders for the programme conducted during evening A candidate who has passed 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 is eligible to B.E Courses, and 40 % of marks in case of 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 professional experience as on first September of the year of admission, in a registered firm/company/industry/ educational / Government / Autonomous organizations in the branch of Engineering/ Technology, in which the candidates hold a diploma, and in which admission is sought by him/her.

17 OB2.2 Further that employment shall be in an establishment situated within the 15 km (continued) from the place of the institution to which the candidate is seeking admission. Professional experience refers to the experience earned as an employee regular basis in, (a) Government, Government Undertaking, Public Sector Undertaking, Corporation or, (b) In a private company registered under the Directorate of Industries and Commerce or the Directorate of Small Scale Industries or, (c) Government, Government recognized Institutions as technical staff. 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. Further, those candidates who have completed Diploma from other than Karnataka state shall provide the Equivalence/ Eligibility Certificate from the Director of Technical Education, Karnataka. 17 OB2.3 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 B.E./B.Tech. Degree Programme from Visvesvaraya Technological University, Belagavi. 17 OB3.0 **Courses** 17 OB3.1 There shall be the following types of Courses: a) Humanities and Social Sciences (HSS) including Management. These are mandatory for all disciplines. b) Basic Sciences (BS): Physics, Chemistry and Mathematics. These are mandatory for all disciplines. c) Engineering Sciences (ES): Materials, Workshop, Drawing, and Basics of Electrical/ Electronics/ Instrumentation/ Civil/ Mechanical/ Computer Engineering. These are mandatory for all disciplines. d) Professional Subjects (PS) - Core: Are the professional Core (PC) Courses, relevant to the chosen specialization/ branch. The core Courses are to be compulsorily studied by a student and are mandatory to complete them to fulfill the requirements of a programme. e) Professional Subjects (PS) - Elective: Are the professional Electives (PE), 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. f) Open Subjects - Electives (OE): Are from other technical areas and/ or from emerging fields. g) Mini project and Main Project: Carried out at the Institution or at an Industry. h) Seminar: Deliverable at the Institution under the supervision of a Faculty. Internship: Preferably at an industry/R and D organization/IT company/ Government organization of significant repute for a specified period mentioned in the Scheme of Teaching and Examination. Mandatory Courses (MC): These Courses are mandatory, without the benefit of a grade or credit, for students admitted to B.E./B.Tech. program. A pass in each mandatory Course is required to qualify for Degree award from the University.

k) Audit Courses (AC): Knowledge/ skill enhancement Courses without the benefit 17 OB3.1 of a grade or credit for a Course. (continued) i) The Audit Course/s (other than the Course/s considered for completing the prescribed program credits) can be any Course offered by the program to which the student is admitted to other programs offered in the institution, where the student is studying. ii) The students who are interested in audit Courses can register for one audit Course at a time during III to VIII semesters. Students, who have opted for audit Courses and considered on par with students registered for credit Courses, have to satisfy the attendance and CIE requirements. However, they need not have to appear for SEE. The number of registrations to an audit Course is restricted to 10 % of the AICTE intake. iii) Registration for any audit Course, in writing, shall be completed at the beginning of semesters. The Institution should intimate the Registrar (Evaluation) about the registration at the beginning of the semester and obtain a formal approval for inclusion of the audit Course/s in the Grade cards/ Transcripts issued to the students. 17 OB3.2 The minimum number of students registered to any Elective offered by the Departments shall be not less than ten. 17 OB3.3 A student shall exercise his option in respect of Elective Courses 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 within 15 days from the date of commencement of the semester as per the calendar of the University. 17 OB3.4 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. 17OB4.0 **Internship/Professional Practice** 17OB4.1 **Internship / Professional Practice:** 1) The Internship shall be completed during the period specified in the Scheme of Teaching and Examination. 2) The internship can be carried out in any industry/R and D Organization/Research Institute/ Educational institute of repute. 3) (a) The Department/college shall nominate staff member/s to facilitate, guide and supervise students under internship. (b) The Internal Guide has to visit place of internship at least once during the student's internship. 4) The students shall report the progress of the internship to the guide in regular intervals and seek his/her advice. 5) After the completion of Internship, students shall submit a report with completion and attendance certificates to the Head of the Department with the approval of both internal and external guides. 6) There will be 50 marks for CIE (Seminar: 25, Internship report: 25) and 50 marks for Viva – Voce conducted during SEE. The minimum requirement of CIE marks shall be 50% of the maximum marks. [To be read along with 17 OB 8.6] 7) The internal guide shall award the marks for seminar and internship report after evaluation. He/she will also be the internal examiner for Viva - Voce conducted during SEE.

17OB4.2	Internship Viva-Voce shall joint 9) In case th Superinter conduct v writing to 10) The stude The Unive	ersity will no ut the Interns	on interns fixed in conviction of the conviction	hip shall be onsultation ce marks. esses his in shall appo- he internal rson, Board rry out the any kind of	e conducted with the ex- nability to int a senior guide. The l of Examination of financial	conduct version faculty of faculty of esame slangers (BOE anywhere assistance	llege and the dide. The E iva voce, to the Depanall be info. in India of the any st	the Chief rtment to formed in or abroad.
	internship is n	nandatory. If	any stude	ent fails to i	undergo /co	mplete th	e internshi	p, he/she
	shall be consid	dered as faile	d in that C	Course and	shall not be	e permitte	d to appear	for SEE
	in that Course	in that Course. However, student shall appear for SEE after satisfying the conditions						
	prescribed for Internship. The reappearance shall be considered as an attempt.							
17OB5.0	Seminar and Project							
17OB5.1	Seminar: Seminar is one of the head of passing.							
	i) Each candidate shall deliver seminar as per the Scheme of Teaching and							
	Examinat	ion on the top	pics chose	n from the	relevant fie	elds for ab	out 30 min	utes.
	ii) The Head	of the Depar	tment sha	ll make arra	angements	for conduc	cting semi	inars
	_	concerned fac	•		-			
	_	arpose by the		_				
		The committ			-		-	
	senior me	ost acting as	the Chai	rman/Chair	person. [To	be read	along with	h 17 OB
	8.6].							
17OB5.2	Project Work	•		_	-			
	Project work shall preferably be batch wise, the strength of each batch shall not exceed							
	maximum of four students.							
17OB5.3	Viva-voce examination in project work shall be conducted batch-wise.							
17OB 6.0	Computation of SGPA and CGPA							
17OB 6.1	(i) The University adopts absolute grading system wherein the marks are converted to							
	grades, and every semester 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						A will be	
							ks under	
	absolute g	grading system	m are as g	iven below	:			
	Level	Outstanding	Excellent	Very Good	Good	Above Average	Average	Fail
	Letter Grade	S	A	В	С	D	Е	+
	Letter Grade					•		F
	Grade Points	10	9	8	7	6	4	F 00
	Grade Points Percentage of	10 ≥90	<90	< 80	< 70	< 60	< 45	
	Grade Points Percentage of Marks Scored	≥ 90	<90 ≥80	< 80 ≥70	< 70 ≥60	< 60 ≥ 45	< 45 ≥40	00 < 40
	Grade Points Percentage of		<90	< 80	< 70	< 60	< 45	00

(iii) A student obtaining Grade 'F' in a Course shall be considered failed 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.

17OB 6.2 Computation of SGPA and CGPA (as per UGC Guidelines)

The following procedures shall be used to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) respectively:

i) 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/her and the sum of the number of credits of all the Courses undergone by a student, i.e.,

$$SGPA = \frac{\sum (C_i \times G_i)}{\sum C_i}$$

Where C_i is the number of credits of the i^{th} Course and G_i is the grade point scored by the student in the i^{th} Course.

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

$$CGPA = \frac{\sum (C_i \times S_i)}{\sum C_i}$$

Where S_i is the SGPA of the i^{th} semester and C_i is the total number of credits in that semester.

The SGPA and CGPA shall be rounded off to 2 decimal places and reported in the transcripts.

17OB 6.2 Illustration for Computation of SGPA and CGPA Computation of SGPA

Illustration No.1					
Course	Credit	Grade letter	Grade point	$Credit\ Point = (Credit \times Grade)$	
Course 1	4	В	08	$4 \times 08 = 32$	
Course 2	4	D	06	4 × 06 = 24	
Course 3	4	C	07	4 × 07 = 28	
Course 4	3	S	10	$3 \times 10 = 30$	
Course 5	3	Е	04	$3 \times 04 = 12$	
Course 6	3	D	06	3 ×06 = 18	
Course 7	2	A	09	2 x 09 = 18	
Course 8	2	D	06	$2 \times 06 = 12$	
Total	25			174	

Thus, SGPA = 174/25 = 6.96

Illustration No.2						
Course	Credit	Grade letter	Grade point	$Credit\ Point = (Credit \times Grade)$		
Course 1	4	В	08	$4 \times 08 = 32$		
Course 2	4	D	06	$4 \times 06 = 24$		
Course 3	4	С	07	4 × 07 = 28		
Course 4	3	S	10	3 × 10 = 30		
Course 5	3	F	00	$3 \times 00 = 00$		
Course 6	3	D	06	$3 \times 06 = 18$		
Course 7	2	A	09	2 × 09 = 18		
Course 8	2	D	06	2 ×06 = 12		
Total	25			162		
Thus, SGPA= 162/25=6.48						

If a Student secures letter grade C during reappearance then the SGPA is Calculated as shown below.

Illustration No. 2(a)							
Course	Credit	Grade letter	Grade point	$Credit\ Point = (Credit \times Grade)$			
Course 5	3	С	07	$7 \times 03 = 21$			

Total Credit Points = Credit Points of first Attempt) + Credit Points of subsequent attempt = 162 + 21 = 183

Total credits of the semester = 25

Thus, SGPA= 183/25=7.32

Illustration No.3					
Course	Credit	Grade letter	Grade point	Credit Point = (Credit x Grade)	
Course 1	4	В	08	$4 \times 08 = 32$	
Course 2	4	D	06	4 x 06 = 24	
Course 3	4	С	07	4 x 07 = 28	
Course 4	3	S	10	$3 \times 10 = 30$	
Course 5	3	A	09	3 x 04 = 18	
Course 6	3	D	06	$3 \times 06 = 18$	
Course 7	2	A	09	2 x 09 = 18	
Course 8	2	D	06	$2 \times 06 = 12$	
Total	25			189	

Thus, SGPA= 189/25=7.56

CGPA (from illustrations 2 and 3) = $\frac{25 \times 7.32 + 25 \times 7.56}{50} = 7.44$

17OB 6.2 (continued)	Semester	I	II	III	IV	V	VI	VII	VIII		
(continued)	Credits of the semester	24	24	27	27	24	24	24	26		
	SGPA	7.00	8.50	9.20	6.86	8.18	7.73	8.68	9.40		
	Thus CGPA = $\frac{(24 \times 7.00 + 24 \times 8.50 + 24)}{(24 \times 7.00 + 24 \times 8.50 + 24)}$	$Thus CGPA = \frac{(24 \times 7.00 + 24 \times 8.50 + 27 \times 9.20 + 27 \times 6.86 + 24 \times 8.18 + 24 \times 7.73 + 24 \times 8.68 + 26 \times 9.40)}{200} = 8.20$									
17OB 6.3	Transcript Format: Based on the secured letter grades, grade points, SGPA and CGPA,										
	the transcript for each all semesters shall be i	semeste			_	_	_				
17OB 7.0	Conversions of Grad		Percenta	ge and I	Declarati	ion of Cl	ass				
17OB 7.1	Conversion Formula F	or The (Conversi	on Of CO	GPA Into	Percenta	age Is Gi	ven Belo)W		
	Percentage Of Marks S	Secured,	P = [CG]	PA Earn	ed - 0.75	5] × 10					
	Illustration For A CGP P = [CGPA Earned 8.3			74.5 %							
17OB 7.2	Class Declaration:			210 30							
	After the conversion of final CGPA into percentage of marks (P), a graduating student is declared 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%.						student is				
17OB8.0	Continuous Internal Evaluation										
17OB8.1	For each theory and practical paper, the CIE marks shall be 40. For Technical seminar, the CIE marks shall be 100. For Internship/ Professional Practice, the CIE marks shall be 50. For Project Phase –I and Project seminar and Project Phase –II, the CIE shall be 100 respectively.										
17OB8.2	CIE Marks in each t	theory (Course s	hall be	the sum	of marl	ks presci	ribed for	r test and		
	assignment.	. 1 11	1 20	1.1 . 6			0				
	Marks prescribed for to The CIE marks for test at the end of fifth, tent	t in a th	eory Cou	ırse shall	be based	d on thre	e tests ge	-			
	for a maximum of 30 i										
	The remaining 10 matests/written Quizzes CIE marks awarded sh	rks shal that sup	ll be awa	arded ba	sed on to me of th	he evalu e Course	ation of e/progran	Assignn n outcor	nents/Unit		
	The candidates shall write the Internal Assessment Tests and Assignments/Ur tests/written Quizzes in Blue Books which shall be preserved by the Principal/ He of the Department for at least three years after the announcement of University						pal/ Head				
	results and shall be (Evaluation).			•					-		

17OB8.3	In the case of a Practical, the CIE marks shall be based on the laboratory journals/ records (30
1,020.0	Marks on continuous evaluation based on conduct of experiment, viva and report writing) and
	one practical test (10 Marks) to be conducted at the end of the semester.
17OD9 4	
17OB8.4	(i) The CIE marks for I year Computer Aided Engineering / Drawing:
	a) 24 marks for class work (sketching and Computer Aided engineering Drawing).
	b) 16 marks for test conducted in the same pattern as that of SEE (The marks secured can
	be taken as best of the two tests).
	(ii) The CIE marks for other Drawings/ Design Drawings offered by various branches shall be
450D0 5	based on the evaluation of the sheets and one test in the ratio 60:40.
17OB8.5	The CIE marks in the case of projects and seminars in the final year shall be based on the
	evaluation at the end of VIII semester 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
15050 (project / seminar guide.
17OB8.6	i. For theory Courses, there shall not be any minimum requirements of CIE marks.
	ii. Minimum requirement of CIE marks for Practical/ Internship/Project work shall be 50%
	of the maximum marks.
	iii. For seminar, the minimum requirement of CIE marks shall be 40% of the maximum
	marks.
17OB8.7	i) Students failing to secure a minimum of 50% of the CIE marks in Practical/
	Internship/Project work shall not be eligible for the Practical / Internship/Project
	examination conducted by the University and they shall be considered as failed in
	that/those Course/s. However, they can appear for University examinations conducted in other Courses of the same semester and backlog Courses if any.
	Students after satisfying the prescribed minimum CIE marks in the Course/s when offered
	during subsequent semester shall appear for SEE.
	ii) If any student fails to secure a minimum of 40% of the maximum CIE marks in seminar/
	fails to deliver the seminar, he/she shall be considered as failed in that Course and shall
	not be eligible for the award of degree. However, the student shall become eligible for the
	award of degree after satisfying the requirements prescribed for seminar during the
	subsequent semester/s. iii) The Course (synder 17008 6 (ii) and (iii) when repeated are considered as attempts
	iii) The Course/s under 17OB8.6 (ii) and (iii), when repeated are considered as attempts.
17OB8.8	CIE marks of those students, who come under 17OB8.7, shall be sent separately to the
150500	Registrar (Evaluation).
17OB8.9	If a student remains absent for all the CIE tests conducted, the CIE Marks shall be marked as
	AB for the Courses against the University Seat Number (USN) of the student in the marks
	sheet submitted to the University by the Principal of the College.
17OB8.10	Improvement of CIE marks shall not be allowed in
	a. Theory Courses and
	b. Laboratory/Workshop/Seminar/Internship/Project where the student has already secured
	the minimum required marks.
17OB8.11	The final list, incorporating corrections (if any) of CIE marks awarded to the students in the
	Theory/Practical/Internship/Project work/ Seminar, shall be displayed on the notice board of
	the college at least seven days before the closure of the semester and a certified copy of the
	same shall be sent by the Principal to the University Examination Section within the stipulated
	date. Every page of the CIE marks sheet shall bear the signatures of the concerned
	Teacher/Teachers, Head of the Department and Principal.
17OB8.12	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.
	corrections on every sheet and attest it with mis/her signature.

150D0 12	Town 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
17OB8.13	CIE marks shall reach the University before the commencement of examination as per the notification issued 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.
17OB 9.0	Eligibility for Passing and Award of Degree(To be read along with 17OB4.2, 5.1, 5.2, 8.6 and 8.7)
17OB 9.1	 (a) For a pass in a theory Course/Drawing, the student shall secure minimum of 35% of the maximum marks prescribed in the University examination and in total 40% of the maximum marks (i.e., prescribed for SEE and CIE) including the CIE marks secured by the student. (b) The Minimum Passing letter grade in a Course is 'E'. (c) For a pass in a Practical/Internship/Project/Viva-voce examination, a student shall secure a minimum of 40% of the maximum marks prescribed for the University Examination. The Minimum Passing Grade in a Course is 'E'.
17OB 9.2	 A student who obtain any grade from 'S' to 'E' shall be considered as passed. If a student secure F grade in any of the head of passing (17 OB 4.2, 17 OB 5.1, 17 OB 5.2 and 17 OB 11.2) he/she has to reappear in that head for the SEE. A student will be declared successful at the end of academic year if he/she has not more than four 'F' grades in the immediate preceding two semesters. A student will be declared successful at the end of program, when he/she has none of the Courses remaining with F grade and shall have CGPA of greater than or equal to 5.00. In case, the CGPA falls below 5.00 at the end of the program, the student shall be permitted to appear again for SEE in full or part of the previous semester Courses by rejecting the performance for required number of Course/s (other than seminar, Project and Practical's) and times, subject to the provision of 17OB1.5, to make up CGPA equal to or greater than 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.
17OB 9.3	The students who do not satisfy the provision 17OB9.2 (1) and the students who remain absent for the University examinations shall be deemed to have failed in that Course/s. They have to reappear for the University examination in the subsequent examinations. The CIE marks awarded to the student/s at first attempt in the concerned theory Course/s will be carried forward. Revised CIE marks are considered only in cases under the provisions of 17OB8.7.
17OB 9.4	Students who pass a Course of a semester as per 17OB 9.1 and has earned CGPA equal to or greater than 5.00 shall not be allowed to appear for any individual Course/s again, unless they opt for rejection of results of entire semester as per 17OB 9.5.
17OB9.5	A student may, at his/her desire, 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. The rejection is permitted only once during the entire programme of study.
17OB9.6	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.

17OB9.7	A student, who desires to reject the total performance of a semester including CIE marks, has
1,02,.,	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.
	Readmission to First 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 170B1.5) will be counted with reference to old USN.
17OB9.8	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.
	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 take admission to the part odd semester (as per 17OR11.2)
17OB9.9	take admission to the next odd semester (as per 17OB11.2). Students who opt for rejection of results of University examination are eligible for the award
17019.9	of class and distinction, but are not eligible for the award of ranks.
17OB9.10	A student shall be declared to have completed the program of B.E. / B.Tech. degree, provided the student has undergone the stipulated Course work as per the Scheme of Teaching and Examination and has earned the prescribed number of credits as per the provision 17OB1.6, having CGPA \geq 5 with none of the registered courses remaining with 'F' grade.
17OB10.0	Attendance Requirement
17OB10.1	Courses of each semester shall be treated as a separate unit for calculation of the
	attendance. The 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
	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.
17OB 10.2	The datum for the calculation of attendance shall be the number of Teaching hours prescribed for a Course [50 hours for 04 credit Courses (theory), and 40 hours for 03 credit Courses (theory) counted from the date of commencement of the semester. In case of Laboratories, the number of classes (deemed as teaching hours) is equal to the number of experiments prescribed under main heading]. In case of late admission, approved by competent authority (DTE/VTU), to I semester/III
	semester (lateral entry scheme)/ III semester (lateral entry scheme) of Engineering programme conducted during evening the attendance shall be reckoned from the date of admission to the programme.

17OB10.3	The Course Instructor/ Mentor/College shall inform the students as well as their parents about the attendance status periodically. Students who are facing the shortage of attendance be mentored to make up the shortage. Principals shall also notify every month, the list of candidates who are under short of attendance.				
17OB10.4	A candidate, who does not satisfy the attendance requirement (in one or more Courses) as mentioned in 17OB10.1 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.				
17OB 10.5	The list of the candidates falling short of attendance shall be sent to Registrar (Evaluation) at least once in a month and final list shall be sent one week prior to the commencement of the examination. The detained students should obtain permission from Registrar, VTU for readmission to the semester concerned as a repeater.				
17OB 11.0	Promotion and Eligibility				
17OB 11.1	There shall be no restriction for promotion from an odd semester to the next even semester, provided the student has fulfilled the attendance requirement.				
17OB 11.2	A student shall be eligible for promotion from an even semester to next odd semester if the student has not failed in more than four heads of passing of the immediately preceding two semesters and has passed in all the Courses of all the lower semester examinations. Each credit Course shall be treated as a head of passing.				
	Illustrations:				
	a) A student seeking eligibility to III semester should not have failed in more than heads of passing of I and II semesters considered together.				
	b) A student seeking eligibility to V semester should have passed in all the subjects of I and II semesters and should not have failed in more than 4 heads of passing of III and IV semesters considered together.				
	c) A student seeking eligibility to VII semester should have passed in all the subjects to IV semester and should not have failed in more than 4 heads of passing of V a VI semesters considered together.				
	 Lateral entry scheme: a. A student seeking eligibility to V semester should not have failed in more than 4 heads of passing of III and IV semesters considered together. b. A student seeking eligibility to VII semester should have passed in all the subjects of III and IV semesters and should not have failed in more than 4 heads of passing of fifth and sixth semesters considered together. 				

170B 11.3

- a. All students admitted to I semester and to III semester under lateral entry scheme to B.E./B.Tech. programme have to undergo the Mandatory non credit Courses viz., Environmental Studies and English Language. However these Courses shall not be considered for the Eligibility criterion prescribed for promotion, award of Class, calculation of SGPA and CGPA.
- b. The Courses viz., Advanced Mathematics I and II, to be completed by the candidates (diploma holders) admitted to III semester under lateral entry scheme 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 for the completion of the programme and award of degree.
- c. The Courses Viz., (i) Computer Aided Engineering Drawing (ii) Programming in C and Data structure and (iii) Environmental Studies (if not studied at B.Sc. level), to be completed by the candidates who have passed B.Sc. degree and admitted to III semester of the programme, shall not be considered for the award of Class, calculation of SGPA and CGPA. However, a pass in the above Courses is mandatory for the completion of the programme and award of degree.

17OB 12.0 | Temporary Discontinuation/Break in the Program

17OB 12.1

- 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 17 OB 1.5. 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 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 candidates shall not be eligible for the award of rank.
- b) Candidates who takes 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 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. 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.

17OB 13.0	Award of Prizes, Medals and Ranks
17OB 13.1	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
1505 150	awards.
17OB 13.2	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 the student,
	a)
	(i) Has passed I to VIII semester in all the Courses in first attempt only in case
	of candidates admitted I year.
	(ii) Has passed III to VIII semester in all the Courses in first attempt only in case
	of candidates admitted under lateral entry scheme.
	(iii) Has completed all the prescribed Audit/mandatory Courses.
	b) Is not a repeater in any semester because of rejection of result of a semester/
	shortage of attendance etc.
	c) Has completed all the semesters without any break/discontinuity.d) Has completed all the semesters (I to VIII/III to VIII) in VTU constituent college
	or in any VTU affiliated non-autonomous college.
	e) Has not been transferred from autonomous institution affiliated to VTU or from
	any other University.
	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.
	4) For 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 programme, the number of ranks to be
	awarded for Electronics and Communication Engineering shall be 10.
	b. If 90 students appeared for the VIII semester in Biomedical Engineering, the
	number of ranks to be awarded for Biomedical Engineering will be 09.
	5) In case of fractional number of ranks, it is rounded to higher integer only when the
	first decimal place value is greater than or equal to 5.
17 OB 13.3	Ranks are awarded based on the merit of the students as determined 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.
	into account to decide the order of the rank.

17OB 14.0	Transfers of Students								
17OB 14.1	Transfer of students from one college to another college within Karnataka state shall be								
	permitted only at the beginning of third, fifth, and seventh semesters, subject to								
	availability of seats 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								
	college affiliated to VTU is permitted with the approval of the Registrar, VTU								
	subject to the provision 170B11.2.								
	The students seeking transfer shall have to,								
	(i) Obtain No Objection certificate for admission from the University and from								
	both the colleges before the commencement of term as notified by VTU.								
	(ii) Complete the programme subject to the provision 170B1.5.								
	(b) Transfer of students from an autonomous to non – autonomous college affiliated to								
	VTU is permitted with the approval of the Registrar, VTU provided the candidates								
	have passed in all the Courses of the previous semesters.								
	The students seeking transfer shall have to, (i) Obtain No Objection contificate for admission from the University and from both								
	(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 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 SGPA and CGPA. However, a								
	pass in the Additional Courses, if any, is mandatory before the completion of								
	Degree.								
	iii) Complete the programme subject to the provision 17OB1.5.								
	(c) In the case of students from Universities other than VTU, the students must have								
	passed in all the Courses of I and II semesters for admission to III semester and all								
	the Courses of I to IV semesters for admission to V semester and all the Course								
	I to VI semesters for admission to VII semester.								
	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 and obtain No Objection certificate for admission from the University								
	before commencement of term as notified by VTU. ii) Produce No Objection certificate for admission from both the colleges before								
	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 SGPA and CGPA. However, a pass in the								
	additional Courses, if any, is mandatory before the completion of Degree.								
	(ii) Complete the programme subject to the provision 17OB1.5.								
4E OD 444									
17 OB 14.2	Transfer of students within the College from one branch to another branch at the start of								
	III semester shall be permitted with the approval of the Registrar, VTU subject to the								
150D 142	provisions made by the Government of Karnataka and AICTE in this behalf.								
17OB 14.3	The University may prescribe fee for administrative 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).								

17 OB 15.0	Applicability and Power to Modify
17 OB15.1	The regulations governing the Degree of Bachelor of Engineering/Technology of Visvesvaraya Technological University shall be a binding on all concerned.
17 OB15.2	 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.





Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka State

Prof. A S. Deshpande B.E. M.Tech., Ph.D. REGISTRAR

Ref VTU/BGM/Aca-OS/Gen-Cirs/2019-20/ 3013

NOTIFICATION

Phone: (0831) 2498100 Fax: (0831) 2405467

Date : _ 1 AUG 2018

Sub: Regulations Governing the Degree of B.E./ B.Tech. under OBE and (Revised-2018) – reg...

Ref: Executive Council Resolution. No. 2.2.1 dt: 30th May, 2019

Pursuant to the aforesaid Executive Council Resolution, the "Regulations Governing the Degree of B.E./ B.Tech. under outcome Based Education and Choice Based Credit System - (Revised - 2018)" are hereby notified.

These Regulations are applicable for the following students:

- 1. Admitted to I semester/I year from the academic year 2018-19 (i.e. USN XXX18XXXXX)
- 2. Admitted to III semester/II year from the academic year 2019-20 (i.e. USN XXX19XX4XX)

You are hereby directed to bring the same to the notice of all the concerned and to follow them scrupulously.

The previous regulations in this regard (published on VTU website and printed in syllabus books are treated as null and void.

Encl: as above

BY ORDER

REGISTRAR

To,
The of Principals of All Engineering Colleges under the ambit of VTU, Belagavi

Copy to:

- 1. Hon'ble Vice-Chancellor through the Secretary to VC, VTU, Belagavi for kind information
- 2. The Registrar (Evaluation), VTU, Belagavi
- 3. The Regional Directors (I/C) of all the Regional Offices of VTU for circulation
- 4. The Computer Network Centre, VTU, Belagavi- to upload on VTU website
- 5. PS to Registrar, VTU, Belagavi
- 6. All the concerned Special Officer and Case-workers of Academic Section, VTU, Belagavi

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. 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.
- 2) Branch: Means Specialization or discipline of B.E./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.
- 4) Academic Year: Refers to the sessions of two consecutive semesters (odd followed by an even) including periods of vacation.

5)

- Course: Refers to usually 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.
 - **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 the 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, Counsellor 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 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.
- 12) Semester End Examinations (SEE): Refers to the examinations conducted by the University covering the entire Course Syllabus. For this purpose, Syllabi to be modularized and SEE questions to be set from each module, 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 be considered 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 Examinations.
- 16) Letter Grade:

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.

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: 18 OB 6.0]. The rubrics attached to letter grades are as follows: S Outstanding, A Excellent, B Very Good, C Good, D Above Average, E Average and F Fail.
- **18)** Grade Point (GP): Refers to a numerical weightage allotted to each letter grade on a 10-point scale as under.

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

- 19) 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 GP and number of credits for a Course i.e., Credit points (CrP) = $GP \times Credits$ for the Course.
- 21) Semester Grade Point Average (SGPA): Refers to the measure of academic performance of student/s in a semester. [Refer: 18OB6.2]
- **22)** Cumulative Grade Point Average (CGPA): Is a measure of overall cumulative performance of a student over all semesters. [Refer:18OB6.2]
- 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 B.E./B.Tech.
18OB1.2	 (a) The Programme to which students are admitted to First semester of B.E./B.Tech. Programme shall be of four academic year 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 third semester of B.E./B.Tech.
	Programme under lateral entry shall be of three academic year duration, divided into six
	semesters. The actual Teaching and Learning days shall be at least 90 working days in a semester.
	(c) The Programme (conducted during evening) to which students are admitted to third semester of B.E./B.Tech. Programme under lateral entry scheme shall be of three academic year duration, divided into six semesters. The actual Teaching and Learning days shall be for at least 90 working days in a semester. The deficit contact hours of the Programme, conducted during evening on all working days, shall be compensated on all Sundays (except
18OB1.3	on general holidays). The calendar of events in respect of the Preserves of each of the little of t
	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) In case of students admitted to First semester of First year B.E./B.Tech. Programme (i) Students admitted to First year first semester B.E./B.Tech. shall complete the Programme within a period of eight academic years from the date of first admission, failing which they have to discontinue the Programme.
	(ii) A student who has not obtained eligibility to third semester even after three academic
, <u>, , , , , , , , , , , , , , , , , , </u>	years from the date of first admission to first semester shall discontinue the Programme or get readmitted to first semester of first year B.E./B.Tech. with a revised University Seat Number having the same year of admission but serial number of the student starting with SIX hundred series (6XX). (iii) A student who has joined first year (to I or II semester) as a repeater and has not
Resident Spirite	obtained eligibility to third semester even after three academic years from the date of readmission to first year shall discontinue the Programme or get readmitted to first semester of first year B.E./B.Tech., subject to the provision of 180B1.4 (a)(i), with a revised University Seat Number having the same year of admission but serial number of the student starting with SIX hundred series (6XX).
	readmission, he/she shall discontinue the Programme or seek fresh admission following the prevailing admission procedure at that time.
	(v) A student who gets admitted to III semester from I year in three or less than three years shall complete the Programme, with or without break, within a period of eight academic years from the date of first admission, failing which they have to discontinue the Programme or seek fresh admission following the prevailing admission procedure at that time. (b) In case of lateral entry students admitted to Third semester of Second year B.E./B.Tech. Programme.
	(i) Students admitted to second year third semester B.E./ B.Tech. shall complete the Programme within a period of six academic years from the date of first admission, failing which they have to discontinue the Programme. (ii) A student who has not obtained eligibility to fifth semester even after two academic
	years from the date of first admission to third semester shall discontinue the Programme or get readmitted to third semester of second year B.E./B.Tech. with a revised University Seat Number having the same year of admission but serial number of the student starting with SEVEN hundred series (7XX).
	(iii) A student who has joined second year (to III or IV semester) as a repeater and has not

	Effective from the Academic Year 2018 – 19
18OB1.5	obtained eligibility to fifth semester even after three academic years from the date of readmission to second year shall discontinue the Programme or get readmitted to third semester of second year B.E./B.Tech., subject to the provision of 18OB1.4 (b) (i), with a revised University Seat Number having the same year of admission but serial number of the student starting with SEVEN hundred series (7XX). (iv) A student, who has been readmitted to second year [as per 18OB1.4 (b) (ii) and (iii)], does not get eligibility to fifth semester even after two academic years from the date of readmission to second year, he/she shall discontinue the Programme or seek fresh admission following the prevailing admission procedure at that time. (v) A student who gets admitted to V semester from II year in two or less than two years shall complete the Programme, with or without break, within a period of six academic years from the date of first admission, failing which they have to discontinue the Programme or seek fresh admission following the prevailing admission procedure at that time. Prescribed Number of Credits for the Programme [to be read along with 18OB12.2]: (a) The number of credits to be completed by students admitted to first semester of
	 B.E./B.Tech. Programme shall be 175. (b) The number of credits to be completed by students admitted to third semester of B.E./B.Tech. Programme under lateral entry scheme shall be 135. (c) A student shall be eligible to get Undergraduate degree with Honours, if he/she earns additional 20 credits, as per VTU norms issued from time to time regarding the earning of additional credits. [To be read along with Regulations Governing the award of Honours' in B.E./B.Tech. Degree Programmes.]
18OB1.6	 (a) Definition of Credits: (a.1) 1 hour Lecture (L) per week per semester = 1 Credit (a.2) 2 hours Tutorial (T) per week per semester = 1 Credit (a.3) 2 hours Practical/Laboratory/Drawing (P) per week per semester = 1 Credit. (a.4) Four credit theory courses shall be designed for 50 hours of Teaching – Learning process. (a.5) Three credit theory courses shall be designed for 40 hours of Teaching – Learning process.
18OB2.0	Eligibility for Admission to B.E./B.Tech. Programmes (As per the Government orders issued from time to time)
180B2.1	(a)Day Engineering College (Eligibility: Candidates who have Passed Second PUC/Twelfth standard) (i) Passed Second PUC/12 th 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 of Karnataka only. (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 B.E./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 Engineering 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 B.E./B.Tech. Programmes, in respective branch of Engineering (as notified by the Government of Karnataka for admission to 3rd semester / 2nd year B.E./B.Tech.) and 40 % of marks in qualified examination in case of SC, ST and Backward Classes of Karnataka candidates. (ii) Those candidates who have completed Engineering Diploma from other than Karnataka state shall provide the Equivalence/ Eligibility Certificate issued from the Director of Technical Education, Karnataka.

	Effective from the Academic Year 2018 – 19
	(c) Evening Engineering College (Eligibility: Candidates who have Passed 3 year
	Diploma): (i) A candidate who has passed any Engineering 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 B.E./B.Tech. Programmes, in respective branch of
	Engineering (as notified by the Government of Karnataka for admission to 3rd semester / 2nd year B.E./B.Tech.) 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 st September of the year of admission, in a registered firm/Company/Industry/Educational Institution /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 or Private company registered under the Directorate of Industries and Commerce or the Directorate of Small Scale Industries or Government recognized Institutions as technical staff. 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 genuineness of 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.
18OB2.2	With regard to the qualification earned from foreign countries, Equivalence certificate from the University/ Association of Indian Universities 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 Equivalence Committee shall be the final in establishing the eligibility of the student.
18OB3.0	Courses
180B3.1	There shall be the following types of Courses: (a) Humanities, Social Sciences and Management Courses (HSMC): These are mandatory for all disciplines. (b) Basic Sciences Courses (BSC): Physics, Chemistry and Mathematics. These are mandatory for all disciplines.
STAR ISS DIE	 (c) Engineering Science Courses (ESC): Materials, Workshop, Drawing, and Basics of Electrical/ Electronics/ Instrumentation/ Civil/ Mechanical/ Computer Engineering etc. These are mandatory for all disciplines. (d) Professional Core Courses (PCC) - Core: Are the professional Core Courses, relevant to
AGAM!	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.
	 (f) Open Elective Courses (OEC): Are the Elective Courses from other technical areas and/or from emerging fields. (g) Project Work (PROJ): Mini project and Main Project. Carried out at the Institution or

elsewhere without affecting with the regular classwork.

Regulations Governing the Degree of Bachelor of Engineering/Technology (B.E./B.Tech.) Under Outcome Based Education (OBE) and Choice Based Credit System (CBCS)

200	Effective from the Academic Year 2018 – 19					
	(h) Seminar: Deliverable at the Institution under the supervision of a Faculty.					
	(i) Internship: Preferably at an industry/R and D organization/IT company/Government					
	organization or elsewhere of significant repute for a specified period as mentioned in					
	Scheme of Teaching and Examinations.					
	(j) Mandatory Courses (MC): These Courses are mandatory, without the benefit of a grade					
	or credit, for students admitted to B.E./B.Tech. Programme. A pass in each mandatory					
	Course is required to qualify for the award of degree.					
18OB3.2	The minimum number of students registered to any Elective Course offered by the					
	Departments shall be not less than ten.					
	However, the above condition shall not be applicable to Programmes having class strength					
	of less than 10. In such cases, only one elective course shall be offered.					
18OB3.3	A student shall exercise his option in respect of Elective Course/s and registered 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.					
18OB3.4	Course Registration:					
	In order to maintain proper academic record of each student at the Institution, 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.					
18OB4.0	Internship/Professional Practice					
18OB4.1	Internship / Professional Practice					
	The Internship shall be completed during the period specified in the Scheme of Teaching					
a a	and Examinations.					
	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 Examinations.					
	2) The Department/college shall nominate staff member/s to facilitate, Guide and supervise					
	students under internship.					
1	3) The students shall report 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					
SERVICE UNITED STATES	both internal and external Guides.					
Mille	5) There shall be 40 marks for CIE and 60 marks for SEE. The minimum requirement of					
4.6.2	CIE marks shall be 50% of the maximum marks.					
Ar all of	6) The internal Guide shall be the internal examiner for the SEE.					
Way Par	7) 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					
No.	with the external Guide. The Examiners shall jointly award the SEE marks. [To be read					
1	along with 18OB8.9 (f)]					
	8) In case the external Guide expresses his inability to conduct the Examination, the					
	Principal /Chief Superintendent of the Institute shall appoint a senior faculty of the					
	Department to conduct the Examination along with the internal Guide.					
	9) Non-availability of Internal guide due to inevitable situations for the conduct of SEE, the					
i	Principal /Chief Superintendent of respective institute shall appoint a senior faculty of the					
	Department to conduct the Examination.					
	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 carrying out					
	the Internship.					
18OB 5.0	Technical Seminar and Project					
18OB 5.1	Technical Seminar: Technical Seminar is one of the head of passing.					
	(i) Each candidate shall deliver Technical seminar as per the Scheme of Teaching and					
	Examinations on the topic chosen from the relevant field.					
	(ii) The Head of the Department shall make arrangements for the conduct of seminars					
	make arrangements for the conduct of semillars					

12.	- Lander O	Ef	fective from	the Acaden				(CDC3)		
	through	through concerned faculty members of the Department. The committee, constituted for the purpose by the Head of the Department, shall award the CIE marks for the seminar. The committee shall consist of two senior faculty members of the Department and the senior								
	purpose l									
	committe									
100D 5 2	most acti	most acting as the Chairperson. [To be read along with 18OB8.2 (e)]								
18OB 5.2	Project:	Project: Project (Mini and Main) is one of the head of passing.								
	Mini Proj	Mini Project Work and Main Project Work shall preferably be batch wise, the strength of each batch shall not exceed a maximum of four students. [To be read along with 18OB 8.2]								
	each batc	en snall not e	xceed a ma	ximum of i	our stu	dents. [To	be read al	long with	18OB_8.2	
18OB 5.3	Eveninet	OB8.9 (f) ar	Droiset Wes	s mentione	i in Sch	eme of 1	eaching an	d Examina	tions.]	
18OB 5.5		ions in Mini			Projec	t Work si	nall be cond	ducted bate	h-wise.	
		tion of SGP			_					
18OB 6.1	(1) The U	Jniversity ac	lopts absolu	ite grading	systen	n wherein	n the mark	s are con	verted to	
	grades, a	nd every se	mester resu	its shall be	decla	red in te	rms of Sei	nester Gra	de Point	
	Average	(SGPA) con	sidering all	the course	appea	red in tha	at Semester	End Exam	ninations	
	courses t	backlog cou	vet been o	papers (re	ers to	courses o	tner than t	ne current	semester	
	The CGP	hat have not A will be cal	culated for	ompicicu) a	ilu Cui.	nunanve (orage Poin	1 Average	(CGPA).	
	(ii) The	grading syst	em with th	e letter or	idec an	d the ac	ie mist sem cianad ron	esier.	lea sumalau	
	absolute s	grading syste	m shall be a	s given bel	ow.	u tiic as.	signed fair	ge of mar	ks under	
				-		<u> </u>	Above	A		
	Level	Outstand	ding Exce	ellent Ver	y Good	Good	Average	Average	Fail	
	Letter Grade	_ \3	/	A	В	С	D	Е	F	
	Grade Point)	8	7	6	4	00	
	Marks Scor			<90 < 80 ≥80 ≥70		< 70 ≥60	< 60 ≥ 45	< 45 ≥40	< 40	
	in a Course	(90 -10	0) (80	- 89) (7-) - 79)	(60- 69)	(45 - 59)	(40 - 44)	(0 - 39)	
	(iii) A stu	dent obtaini	ng Grade F	in a Cours	e shall	be consid	dered fail a	and is rea	quired to	
	reappear	in the subs	equent SEE	. Whatever	the len	ter grade	secured by	the stude	nt during	
	his /her r	reappearance	shall be av	warded. Th	numb	er of atte	empts take	n to clear	Course/s	
	shall be in	ndicated in	the grade ca	rd.			F		004100,5	
18OB6.2	Computa	ation of SG	PA and C	GPA						
	The follo	wing expres	ssions shall	he used to	comp	ute the S	emester G	rade Poin	t	
	Average	(SGPA) and	Cumulati	ve Grade I	oint A	versoe (CCDA) roc	mantivalu		
	Arrelage							- •		
AN ISO THE SE	S CCDA - Y	\sum [Course Credits \times Grade Points] for all the Courses in that Semester								
	SGPA = -	$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}$								
Mille		Zicourse creatis j for all the Courses in that Semester								
A. 6. 2.		$\sum [Course\ Credits\ imes\ Grade\ Points]\ for\ all\ Courses\ excluding$								
P. Chica.	CCDA	those with F grades until that Semester								
Va. 22	LGPA = -	$CGPA = \frac{Those with T grades white that Semester}{\sum [Course Credits] for all Courses excluding}$								
			hose with i							
8	-			Ü						
	The SGP/cards.	I make the grade								
	(a) SGPA	and CGPA	Calculation	ns: An Illu	trative	Exampl	e for one a	cademic v	ear	
					i i			J		
	Semester (Odd :I, Even: II)	Course	Credits	de	g-	Points (GP)	dit nts P)			
	od of	Code	j.	Grade	25	<u>5</u> 5	Credit Points (CrP)	SGPA,	CGPA	
	N C E	*				_				
	I	XX101	5:0:0 = 5	В		8	5x8=40			
	I	XX102	3:2:0 = 5	Absent(F)	0	5x0=00	-	117	
	I	XX103	3:0:0 = 3	A		9	3x9=27	- SGPA =	25	
			L		1.			1		

XX104

0:1:1=2

= 4.68

2x0=00

	200			m the Acad	emic	rear	2018 - 1	9		
	I	XX105	4:1:0 =				6	5x6=30	110000	-
	I	XX106	5:0:0 =	_			4	5x4=20		
	Total 25(18*) Total 117 (18*): Total credits of the semester excluding the credits of the courses under F grade.									
	(18*): Tota	for the	the sem	nester excl	uding	the	credits	of the cour	ses unde	r F grade.
!	consideration	Considered for the calculation of CGPA of the two consecutive semesters under consideration.								
	II	XX107	3:1:1=	5 C			7	5x7=35	Т	
	II	XX108	4:0:0=		-		8	4x8=32	\dashv	201
	II	XX109	3:0:0=			6		3x6=18	$SGPA = \frac{201}{32}$	
	II	XX110	4:1:0=:				4	5x0=18 5x4=20	-	= 6.28
	II	XX111	2:1:1=4		-+		9	4x9=27	\dashv	
10	II	XX112	2:0:0=2				0	2x0=00	CGPA	
	II	XX113	0:2:0=2				8	2x8=16		7 + 201)
	I semester		0.2.0-	5 5			0	270-10	_ =	3 + 30
	I	XX102	3:2:0=	5 D			6	5x6=30	$=\frac{318}{48}=$	= 6 63
	I	XX104	0:1:1=2				7	2x7=14	48	- 0.05
		Total	32 (30*				Total	201	-	
	(30*): Total			/	ıding	the o			ses under	· F grade
	Considered	for the	calculatio	n of CG	PA o	f th	e two	consecutive	semeste	ers under
	consideration	n								
	(b) CGPA (Calculation	of the P	rogramme	: An	Illus	trative l	Example		
/ wei	Semester	I	II	III	IV	_	V	VI	VII	VIII
I July	Credits of the	ne 20	20	24	24	4	25	24	20	18
Legico 018.	semester		1		ļ					
Male 590	SGPA	4.68	6.28	9.20	6.8	_	8.18	7.73	9.18	9.40
CONT.	∑CrP	117	201	22	16	1	204	185	184	169
S Rull Sad Dise.	CGPA	= [117 + 2	01 + 220	+ 165 + 20 175	04 + 1	185 +	- 184 + 1	$\frac{(69)}{17} = \frac{[144]}{17}$	$\frac{45}{5} = 8.2$	26
18OB6.3	Grade Card	d: Based or	the secu	red letter	grade:	s, gra	ade poin	ts, SGPA a	nd CGPA	A, a grade
	card for each semester and a consolidated grade card indicating the performance in all semesters shall be issued.									
18OB7.0	Conversion	s of CGPA	into Per	centage of	mark	76 27	nd Class	Fauivalan		
18OB7.1										
	Formula for the conversion of CGPA into percentage of marks. Percentage of marks secured, $P = [CGPA \ Earned - 0.75] \times 10$									
	Illustration f	or a CGPA	of 8.20:				-			
	P = [CGPA]	Earned 8.20) - 0.75]×	10						
190D7.3	= 74.5 %	-1.								
18OB7.2	Class Equiv		arcion of	final CCD	\ft.			1	C.I. D	
	Subsequent into percent	age of mark	s (P) a c	man COF? rraduating	studer	a Suc	reckone	completion d to have b	or the Pro	ogramme,
	(i) First Clas	s with Disti	nction (F	CD) if P >	70%	10 13	reckone	u to nave pa	isseu III	
	 (i) First Class with Distinction (FCD) if P ≥ 70% (ii) First Class (FC) if P ≥ 60% but <70% and 									
	(iii) Second									
18OB8.0	Continuous SEE Marks	Internal 1	Evaluatio	n, Semest	er Er	nd E	valuatio	on and M	inimum	CIE and
18OB8.1	Continuous									
	(a) For Vy	/avaharika	Kannada	a (Balake	Kan	nada)/Aadali	tha Kanna	da (Sam	skruthika
	Kannada) th	e maximun	i CIE ma	rks shall be	e 100.	For	the awar	d of credit,	the minii	num CIE
	marks to be	secured sha	II be 40 9	of the ma	ıximu	m ma	arks i.e.,	40 marks.		
	(b) For Project work Phase -1 and Technical seminar the maximum CIE marks shall be 100. For the award of credit, the minimum CIE marks to be secured shall be 50 % of the									
	maximum m	arks i.e., 50) marks.							

- (c) For Practical/ Mini-project/Internship/Project work—Phase 2 the maximum CIE marks shall be 40. To appear for the SEE, the minimum CIE marks to be secured shall be 50 % of the maximum marks i.e., 20 marks.
- (d) For all other theory Courses of the Programme, the maximum CIE marks shall be 40. To appear for the SEE, the minimum CIE marks to be secured shall be 40 % of the maximum marks i.e., 16 marks.
- (f) For Additional Mathematics I and II (to be completed by diploma lateral entry students) the maximum CIE marks shall be 40. To appear for the SEE, the minimum CIE marks to be secured shall be 40 % of the maximum marks i.e., 16 marks.
- (g) For Engineering Graphics and Elements of Civil Engineering and Mechanics (of First Year Engineering and to be completed by B.Sc graduates under lateral entry) the maximum CIE marks shall be 40. To appear for the SEE, the minimum CIE marks to be secured shall be respectively 50 % and 40 % of the maximum marks i.e., 20 and 16 marks.

18OB8.2

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 Cyber Law', 'Environmental Studies', 'Additional Mathematics I and II'], 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 Courses 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 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 Revised Bloom's Taxonomy.
- (iv) Final CIE marks awarded shall be the sum of 180B8.2 (a) (ii) and (iii) for a maximum of 40 marks.
- (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) Engineering Graphics/ Drawing/Field work Courses:

The CIE marks awarded for I year Engineering Graphics Course shall be based on

- (i) Classwork for 24 marks (sketching and Computer Aided Engineering Drawing).
- (ii) 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).
- (iii) Final CIE marks awarded for Engineering Graphics shall be the sum of 18OB8.2 (b) (i) and (ii) for a maximum of 40 marks.
- (iv) 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.
- (v) 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:



	Effective from the Academic Year 2018 – 19
	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 (Balake Kannada)/Aadalitha Kannada (Samskruthika
	Kannada)
	(i) CIE Marks in Vyavaharika Kannada (Balake Kannada)/Aadalitha Kannada
	(Samskruthika Kannada) shall be the sum of marks prescribed for tests and assignments.
	Marks prescribed for tests shall be 75 and that for the assignments shall 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/oral
1 .	discussions/ quizzes that supports communication skills.
	(iv) Final marks awarded shall be the sum of 180B8.2 (h) (ii) and (iii) for a maximum of
Milito	100 marks.
. S. S. S.	(v) Students shall write the tests in Blue Books and complete the exercises/activates/
Election of	questions given in the University Kannada textbook. These shall be preserved by the
May 23	Principal/ Head of the Department for at least six months after the announcement of
1	University results and shall be made available for verification at the direction of the
We.	Registrar (Evaluation).
18OB8.3	(a) The CIE marks in the case of Internship/Technical Seminar/Mini-Project and Project
100200	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.
	(b) A committee constituted by the Head of the Department of Humanities and Social
	Science shall inspect and authenticate the award the CIE marks for the Course Vyavaharika
	Kannada (Balake Kannada)/Aadalitha Kannada (Samskruthika Kannada). The committee
1	shall consist of two senior faculty members of the Department and the senior most acting as
	the Chairperson.
18OB8.4	(i) Students satisfying the attendance requirement but failing to secure the minimum
2002011	percentage of CIE marks, in any Course/s, shall not be eligible for the SEE conducted by
10	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.
	(ii) Students who have satisfied the attendance requirement but not the CIE requirements
	shall be permitted to register afresh and appear for SEE after satisfying the CIE
1	requirements in the same Course/s (with or without satisfying the attendance requirement)
	when offered during subsequent semester/s.
1	(iii) Each appearance to SEE to complete a course shall be treated as an attempt.
10000 5	
18OB8.5	CIE marks of those students, who come under 18OB8.4, shall also be sent to the Registrar
	(Evaluation) along with other course CIE Marks.

t	(i) 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
5	and 2, shall be displayed on the notice board of the college much before the closure of the semester.
I I	(ii) 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 (hardcopy) shall bear the signatures of the concerned Teacher/Teachers, Head of the Department and Principal.
	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.
s c	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.
180B8.9 (a) (b) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	Semester End Examination Marks and Passing standards a) University examination for all Courses under SEE shall be conducted for a maximum of 100 Marks. The marks secured by the students for 100 marks shall be proportionately educed to a maximum of 60 marks to add the same with the CIE marks for the award of etter grade. b) The University examinations for all the Programmes of study shall be conducted at the end of each semester for all the eight semesters. c) Students having no backlog course/s, may not have more than one examination on the same day. However, students having backlog course/s may face a situation where they may have i) Two examinations scheduled at the same time of the day, iii) To take two examinations on the same day, one during the morning session and the other in the afternoon session, and iii) Examinations on consecutive days. As changing the examination dates is not an option, the examination time table 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 second and third cases, the students shall manage the examinations as per their decision. d) The pattern of the SEE question paper for Courses Technical English I and II, Constitution of India, Professional Ethics and Cyber Law, and Environmental Studies shall be objective type [Multiple Choice Questions (MCQ)]. e) For a pass in a theory Course/Drawing, students shall secure a minimum 35 % of the maximum marks prescribed for the University examination and in total 40 % of the Course maximum marks, i.e., the sum of the CIE and SEE marks prescribed for the Course. f) For a pass in Practical/ Mini-project / Internship/Technical Seminar/Project work, students shall secure a minimum of 40 % of the Course maximum marks prescribed for the University examination. (he are a pass in Practical/ Mini-project / Internship/Technical Seminar/Project work, students shall be declared fail if the candidate (h.a) Fails to satisfy the conditions 180B8.9 (

	Effective from the Academic Year 2018 – 19
18OB8.10	Students who pass a Course of a semester as per 18OB8.9 (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 academic Programme,
	subject to the provision 180B1.4, shall be allowed to appear for only SEE of Course/s to
	make up the deficiency in CGPA.
18OB8.11	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 examinations of a
	semester. The rejection is permitted only once during the entire Programme of study.
18OB8.12	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 VIII semester project
	shall not be permitted.
	(i) 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
	18OB12.1, 12.2 and 1.4.
	(ii) If the rejection of SEE results excluding CIE marks is of odd semester, students shall be
	allowed to take admission to the immediate next even semester,
	(iii) If the rejection of SEE results excluding CIE marks is of even semester, then students
	shall not be allowed to take admission to the next odd semester as per 18OB10.3. In such
la l	cases, students shall take admission to the next odd semester of the prevailing scheme
	during the subsequent academic year/s, after obtaining the eligibility to move to higher
	compactor There also 1
	(iv) Readmission to odd/even semester as per 180B8.12 (i) and (iii) shall not be considered
	as fresh admission and therefore students shall continue to have the same University Seat
. Hels	Number, which was allotted earlier. The maximum duration of the Programme (as per
Unit	18OB1.4) shall be counted with reference to old University Seat Number.
A RAN SER DINES	(v) Applications for rejection and approval to reappear for University examinations shall be
2,0000	sent to the Registrar (Evaluation) through the Principal of the College within 30 days from
China. 3	the date of announcement of the results. Late submission of applications shall not be
CALL	accepted for any reasons.
	(vi) 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.
18OB8.13	Students who ont for rejection of results of University events at 111 U. 111 C
10000.13	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 and Honours Degree.
18OB9.0	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
25	of condonation of 10% of the attendance by the Vice-Chancellor on the specific
1	recommendations of the Principal of the college where the candidate is studying,
	based on medical grounds, participation in University/State/ National/ International level
	sports and cultural activities, seminars, workshops, paper presentation etc., of
	significant value. The supporting documents for condoning the shortage of attendance
	shall be submitted along with the recommendations.
10000	
18OB9.2	(a) The basis for the calculation of attendance shall be the period prescribed by the
	University by its calendar of events and as notified by the Registrar (Evaluation) from time
	to time.
	(b) In case of late admissions, approved by competent authority (DTE/VTU), to I semester/
	III semester (lateral entry scheme) of day college/III semester (lateral entry scheme) of
	Engineering Programme conducted during evening, the attendance shall be reckoned from
	the date of admission to the Programme.

	Effective from the Academic Year 2018 – 19
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 and
	including the Courses Additional Mathematics I and II) as mentioned in 180B 9.1 shall not
	be eligible to appear for the Semester End Examinations 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.
18OB10.0	Vertical Progression (Promotion/ Eligibility to higher semesters)
18OB10.1	There shall be no restriction for promotion from an odd semester to the next even semester,
	provided the student has fulfilled the attendance requirement.
18OB10.2	Along with the reasons specified at 18OB8.9 (h), a student shall be declared fail if he/she
	(i) Has not satisfied the CIE requirements of any Course/s.
	(ii) Has not registered for the SEE even after satisfying the attendance and CIE
	requirements.
18OB10.3	(A) Vertical Progression in case of students admitted to First year:
TOODIO	(a) Students having not more than four F grades in the two semesters of first year of the
	Programme shall be eligible to move to second 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) Students who have earned all the prescribed credits of I year, and having not more than
	four F grades in the four semesters of II and III year shall be eligible to move to IV year.
	(B) Vertical Progression in case of Diploma students admitted to Second year (lateral
i e	entry):
	(a) Students having not more than four F grades (excluding the Fail or pass status of
	Additional Mathematics Land II) in the two samesters of II year of the Programme shall be
STRUM SOUD ON SOUTH OF SOUTH O	eligible to move to III Year.
/	(a.1) Students having not more than four F grades (excluding the Fail or pass status of
JAN JAN	Additional Mathematics I and II, if any) in the four semesters of II and III year shall be
18 18.	eligible to move to IV year.
15,000,000	(b) The mandatory non - credit Courses Additional Mathematics I and II prescribed at III
Child . 2	and IV semesters respectively, to lateral entry Diploma holders admitted to III semester of
CAR	B.E./B.Tech. Programmes shall attend the classes during the respective semesters to satisfy
A Pro	attendance and CIE requirements and to appear for the University examinations.
	(b.1) In case, any student fails to satisfy the attendance requirement of the Courses
	Additional Mathematics I and II, he/she shall not be eligible to appear for the Semester End
	Examinations 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.
	(b.2) Students who have satisfied the attendance requirement but not the CIE requirements
	of the Courses Additional Mathematics I and II shall be permitted to register afresh and
3	appear for SEE after satisfying the CIE requirements in the same Course/s (with or without
	satisfying the attendance requirement) when offered during subsequent semester/s.
	(c) 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 Elements of 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 the Fail or pass status of
	Engineering Graphics and Elements of 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) The prescribed mandatory non credit Courses Engineering Graphics and Elements of Civil Engineering and Mechanics of First Year Engineering Programme to lateral entry B.Sc. holders admitted to III semester of B.E./B.Tech. Programmes, shall attend the classes during the respective semesters to complete CIE and attendance requirements and to appear for the University examinations.
- (b.1) In case, any student fails to satisfy the attendance requirement of the above said Courses, he/she shall not be eligible to appear for the Semester End Examinations 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.
- (b.2) Students who have satisfied the attendance requirement but not the CIE requirements of the above said Courses, shall be permitted to register afresh and appear for SEE after satisfying the CIE requirements in the same Course/s (with or without satisfying the attendance requirement) when offered during subsequent semester/s.
- (c) Completion of Engineering Graphics and Elements of Civil Engineering and Mechanics shall be mandatory for the award of degree.

The Principal of each college shall make suitable arrangements in the timetable to facilitate the B.Sc students to attend the above mentioned courses to satisfy the CIE and attendance requirements and to appear for the University examinations.

18OB11.0 Award of Degree

18OB11.1

1. B.E./B.Tech. degree

- (a) Students shall be declared to have completed the Programme of B.E. / B.Tech. degree and is eligible for the award of degree, provided the students have undergone the stipulated Course work of all the semesters under the Scheme of Teaching and Examinations and has earned the prescribed number of credits as per the provision 18OB1.5. [To be read along with 18 OB 12.1 and 12.2]
- (b) For the award of degree, a CGPA \geq 5.00 at the end of Programme shall be mandatory. [To be read with 18OB11.2 (1)]
- (c) Completion of Additional Mathematics I and II, shall be mandatory for the award of degree to lateral entry diploma students.
- (d) Completion of Engineering Graphics and Elements of Civil Engineering and Mechanics of First Year Engineering Programme shall be mandatory for the award of degree to lateral entry B.Sc graduates.
- (e)(i) 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 through AICTE Activity Point Programme for the award of degree. Students transferred from other Universities/ Autonomous colleges under VTU 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.
- (ii) Activity Points (non-credit) have no effect on SGPA/CGPA and shall not be considered for vertical progression.

In case students fail to earn the prescribed activity Points before the commencement of 8th semester examinations, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

2. B.E./B.Tech. (Honours) degree

- (a) A student shall be declared to have completed the Programme of B.E. / B.Tech. degree and shall be eligible to get undergraduate BE/B.Tech degree with Honours, provided.
- (a.1) The student has undergone the stipulated Course work of all the semesters under the same Scheme of Teaching and Examinations and has earned the prescribed number of credits as per the provision 18 OB1.5 (a) and (b).
- (a.2) Has earned additional 20 or more credits through University approved online Courses.
- (a.3) Satisfies the Regulations Governing the award of Honours at B.E./B.Tech. Degree Programmes.



		Effective from the Academic Year 2018 – 19
	18OB11.2	(1) Noncompliance of CGPA ≥5.00 at the end of the Programme
		(a) 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.
		(b) In the cases of 18OB11.2 (1) (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 maximum direction of the December of
		times, subject to the provision of maximum duration of the Programme to make up the
		CGPA equal to or greater than 5.00 for the award of the Degree.
		(c) In case, the students earn improved grade/s in all the reappeared course/s, the CGPA
		shall be calculated considering the improved grade/s. If it is \geq 5.00, the students shall
		become eligible for the award of the degree. If CGPA <5.00, the students shall follow the
		procedure laid in 18OB11.2(1) (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 students shall become eligible for the award of the degree. If
		CGPA <5.00, the students shall follow the procedure laid in 18OB11.2 (1) (b).
		(a) In case, the students come improved and to be consisted in 100B11.2 (1) (b).
		(e) In case, the students earn improved grade/s in some courses and fail in the other
e;		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 students have
		failed. If it is ≥5.00, the students shall become eligible for the award of the degree. If CGPA
		<5.00, the students shall follow the procedure laid in 18OB11.2 (1) (b).
		(f) In case, the students fail (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 students shall follow the procedure laid in 18OB11.2 (1) (b).
		(g) Students shall obtain written permission from the Registrar (Evaluation) to reappear in
	Į	SEE to make up the CGPA equal to or greater than 5.00.
		(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 finite-project shall be declared fall
		in that course and shall have to complete the same during subsequent University
		examinations after satisfying the Mini-project requirements. Also, mini-project shall be
1	Inite .	considered for eligibility to VII semester.
۴	THE STATE OF	(3) Noncompliance of Internship
	11 1001 101	(a) All the students of B.E./B.Tech. shall have to undergo mandatory internship of 4 weeks
S	Vilo. 230	during the vacation of VI and VII semesters and /or VII and VIII semesters. A University
3	and the	examination shall be conducted during VIII semester and the prescribed credits shall be
ζ.	NG!	included with the credits of VIII semester. Internship shall be considered as a head of
3		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 examinations after satisfy the internship
		requirements.
	18OB12.0	Temporary Discontinuation/Break in the Programme/Change in Scheme of Study
	18OB12.1	(a) If a candidate, for any reason, temporarily discontinues the Programme or take a break
		from the Programme during any semester intentionally, he/she shall be permitted to
		continue the Programme by registering to the same semester of the prevailing scheme. The
		candidate from that semester shall attend and complete all the remaining Course works of
		all the semesters, adhering to the regulations of the prevailing scheme and subject to the
		provision 180B1.4. Also the Candidates may have to complete additional Course/s, if any,
		as per the decision of concerned Board of Studies 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. Based on the individual
		cases, they 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 / Honours
		degree. Such candidates shall not be eligible for the award of rank / Honours degree.
		ucerco.

degree.

	Effective from the Academic Year 2018 – 19
	(b) Candidates who take admission to any semester of the existing scheme from another scheme, as a repeater/fresher because of various reasons, shall attend and complete all the remaining semester/s of the 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 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. Based on the individual cases, they shall be 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/Honours Degree. (c) The credits to be earned by the candidates under 18OB12.1 (a) and (b) and 18OB14.1(b) and (c) shall be decided by the University along with the additional Course/s to be completed.
18OB12.2	(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 constituent/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 or courses not studied earlier and make up the credits earned equal to or greater than the required for the award of degree. (iii) If the earned Programme credits are greater than the prescribed, the CGPA shall be proportionately reduced to the prescribed Programme credits.
18OB13.0	Award of Prizes, Medals and Ranks
18OB13.1	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.
180B13.2	1) For award of rank in a Specialization of Bachelor of Engineering/ Technology, the CGPA secured by the students from III to VIII semester shall be considered. (2) The additional credits earned for the award of Honours 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 degree of Bachelor of Engineering/ Technology, provided that the student, (a) (i) Has passed all the Courses of Lto VIII semester in first attempt only in case of
HAR HAR HAR	 (a) (i) Has passed all the Courses of I to VIII semester in first attempt only in case of Candidates admitted to I year. (ii) Has passed all the Courses (including Additional Mathematics I and II in case Diploma students/ Engineering Graphics and Elements of Civil Engineering and Mechanics in case of B.Sc graduates under lateral entry) of III to VIII semester in 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 etc. (c) Has completed all the Courses/semesters of the same Scheme of Teaching and Examinations without any break/discontinuity. (d) Has completed all the semesters (I to VIII/III to VIII) in VTU constituent college or in any VTU affiliated non-autonomous college. (e) Has not been transferred from any autonomous institution affiliated to VTU or from any other University. (4) The total number of ranks awarded shall be 10% of total number of students appeared in VIII semester subject to a maximum of 10 ranks in a Specialization. (5) For 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 Programme, the number of ranks to be awarded for Electronics and
	Communication Engineering shall be 10.

	Effective from the Academic Year 2018 – 19
	(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.
	(6) 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.
18OB13.3	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
1	account to decide the order of the rank.
18OB14.0	Transfer of students
18OB14.1	(a) (i) Transfer of students from one VTU affiliated non – autonomous college to another
Red Ballings	VTU non – autonomous affiliated college shall be permitted only at the beginning of third, fifth and seventh semesters, subject to availability of seats within the permitted intake in respective Colleges with the approval of the Registrar, VTU subject to the provision 18OB10.3. (ii) The students seeking transfer as per 18OB14.1 (a) (i) shall have to obtain No Objection certificate for admission from the University and from both the colleges before the commencement of term as notified by VTU. (iii) Complete the Programme subject to the provision 18OB1.4. (b) Transfer of students from an autonomous to non – autonomous college, affiliated to VTU is permitted with the following conditions. (i) Transfer shall only be at the beginning of III and V semester B.E./B.Tech. Programme. (ii) No transfer shall be permitted to VII semester B.E./B.Tech. Programme. (iii) Students who are seeking transfer must have passed in all the Courses of the previous semesters. (iv) Obtain No Objection certificate for admission from the University and from both the colleges before commencement of term as notified by VTU.
	additional Courses, if any, is mandatory before the completion of Degree.
	(iv) Earn the credits as decided by the University as per 18OB12.2.
	(v) Complete the Programme subject to the provision 18OB1.4.
18OB14.2	Transfer of students within the College from one branch to another branch at the start of III semester shall be permitted with the approval of the Registrar, VTU subject to the provisions made by the appropriate authorities.
	provisions made by the appropriate authornes.

Execute from the Academic Teal 2010 - 17	
18OB14.3	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).
18OB15.0	Applicability and Power to Modify
18OB15.1	The regulations governing the Degree of Bachelor of Engineering/Technology of Visvesvaraya Technological University shall be a binding on all concerned.
18OB15.2	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.

ACTON .

REGISTRAR
Visvesvaraya Technological University,
BELAGAVI - 590 018.