Shivaji University, Kolhapur

Regulations and Guidelines

Choice Based Credit System (CBCS)

Bachelor of Technology (B. Tech.) Program

Under the Faculty of Science & Technology

(To be implemented from Academic Year 2018-19)

(Course common to all programs except Architecture and Textile Engineering)

Preamble:-

1. **Implementation of Regulations & Guidelines:** The Regulations & guidelines shall be implemented gradually as mentioned below –
   - **A.** B.Tech. Part – I from Academic year 2018-19
   - **B.** B.Tech Part – II from Academic year 2019-20
   - **C.** B.Tech Part – III from Academic year 2020-21
   - **D.** B.Tech Part – IV from Academic year 2021-22
2. **Eligibility Criteria:** As per rules and regulations of Government of Maharashtra.
3. **Duration and Pattern of program:** The total duration of B.Tech Program will be of 4 years. The pattern of CBCS will be of Semester type. There shall be 8 Semesters each of 6 months duration.
4. **Weightage**: There shall be **6300** marks for 4 years B.Tech CBCS Program with **198** Credits.
   - **A.** B.Tech **Part – I (Sem I & II) :**

     For B.Tech. Part I total Credits shall be 48 with 24 Credits for each Semester, of these; there shall be 17 Credits for theory and 6 credits for practical and 01 credit for Tutorial per Semester.

I) **Allotment of groups to students:**

There are two groups in each Semester : I. Physics Group and 2. Chemistry Group

a) **Semester – I :** 50% students from each college will be admitted to Physics Group and remaining 50% will be admitted to Chemistry Group. The concerned College will decide the number and names of the students to be admitted in Physics and Chemistry groups and inform the same to the University.

b) **Semester – II :** The students from Physics group in Semester-I will be admitted to Chemistry Group in Semester-II. The students from Chemistry Group in Semester-I will be admitted to Physics Group in Semester-II.

c) There shall be two Basic Science Courses (subjects), four Engineering Science Courses and one Humanities and Management course per Semester.

d) There shall be Skill Enhancement Course I for Sem-I and Skill Enhancement Course II for Sem-II.

II) Evaluation Scheme:

i. Sem I & II shall be evaluated for 700 marks each.

ii. There shall be theory papers for each course of 70 marks as End Semester Evaluation (ESE) and 30 marks for Continuous Internal Evaluation (CIE). There shall be minimum 40 % marks required for passing. ESE and CIE shall be considered as separate head of passing.

iii. There shall be 25 marks for term work for each course except workshop practice. For workshop practice term work shall be of 50 marks.

iv. There shall be no theory paper for Humanities and Management course.

v. The duration of theory paper for the subject Engineering Graphics will be 4 Hrs.

vi. Practical hours in the Subject 'Basic Electronics and Computer Programming in 'C' are to be utilized for Computer Programming in 'C' only and the term work will be assessed on the basis of computer programming in 'C' only.

vii. **Term Work :** The term work shall be assessed based on performance of student for practical and tutorial hours. The term work is to be assessed weekly.

B. <u>B.Tech. Part II to IV (Sem III to VIII) –</u>

a) As per directives of Supreme Court/ MHRD, a mandatory Course of Environmental Studies must be included either in Sem III or IV. The total no. of credits will be 2+1=3 (2 for the theory and 1 for the project). Theory paper of 70 marks (University Examination) and 30 marks for the project report is included in total marks which is compulsory to all students. This subject should be treated as over and above the regular curriculum.

For Environmental Studies theory paper minimum 25 out of 70 and for project minimum 10 marks out of 30 are required for passing. There shall be separate passing for theory and project examination for Environmental Studies.

b) There shall be a separate passing for ESE & CIE. CIE Should consist of minimum two Internal test of 30 Marks each for 60 minutes.

c) Every branch has to provide **One** Open Electives for Sem V & VI each having 3 Credits.

d) Semester wise list of Open Electives to be offered by Programme (branch) shall be mentioned in the syllabus. The enrolment for open elective offered by the respective branch should not exceed the sanctioned intake of Programme.

e) Professional Core Elective (PCE) should be offered in Sem VII & VIII. In Sem VII One PCE and in Sem VIII Two PCE should be offered.

f) The project work should be undertaken in Sem VII & VIII. Phase I - Project work should be evaluated internally for 50 marks in Sem VII and Phase II - Project work should be evaluated for 150 marks in Sem VIII. (50 marks for Internal evaluation and 100 marks for External evaluation)

g) Summer internship/ training for minimum 2 weeks after Sem V or Sem VI is compulsory and should be evaluated in Sem VII based on submission of training report. Although this course has no credit the 25 marks of term work will be allotted for the evaluation of the training report.

Course code	Definitions	Total Credit	Total Percentage
BSC	BASIC SCIENCE COURSES		
PCC	PROFESSIONAL CORE COURSES		
MC	MANDATORY COURSE		
ESC	ENGINEERING SCIENCE COURSES		
PCE	PROFESSIONAL CORE ELECTIVES		
SI	SUMMER INTERNSHIP		
MP	MINI PROJECT WORK		
PW	PROJECT Work		
OEC	OPEN ELECTIVE COURSES		
HM	Humanities and Management		

1. Standard of passing:-

a) Gradation Chart :

Marks Obtained	Numerical Grade (Grade Point)		CGPA	Letter Grade
Absent	0 (zero)		-	-
0 – 39	0 (zero)		0.0 – 4.99	F (Fail)
40 – 49	5		5.00 – 5.49	C
50 – 59	6		5.50 – 6.49	B
60 – 69	7		6.50 – 7.49	B+
70 – 79	8		7.50 – 8.49	A
80 – 89	9		8.50 – 9.49	A+
90 – 100	10		9.50 – 10.0	O (Outstanding)

Note:

1. Marks obtained > = 0.5 shall be rounded off to next higher digit.
2. The SGPA & CGPA shall be rounded off to 2 decimal points.

Calculation of SGPA & CGPA

1. Semester Grade Point Average **(SGPA)**

$$\textbf{SGPA} = \frac{\sum(\text{Course credits} \times \text{Grade points obtained}) \text{ of a Semester}}{\sum(\text{Course credits}) \text{ of respective Semester}}$$

2. Cumulative Grade Point Average **(CGPA)**

$$\textbf{CGPA} = \frac{\sum(\text{Total credits of a Semester} \times \text{SGPA of respective Semester}) \text{ of all Semesters}}{\sum(\text{Total course credits}) \text{ of all Semesters}}$$

5. Result - The result of each Semester shall be declared as Pass or Fail. However, ATKT rules will be followed for theory and practical passing.

6. Revised Rules - These revised rules will be gradually implemented with effect from the academic year 2018 -19 for B.Tech. i.e. Part I to IV. However, the existing (i.e. Pre-CBCS) rules shall remain in force for the students registered before 2018-19.