

Visvesvaraya Technological University, Belagavi

Bachelor of Science (B.Sc.)

Scheme of Teaching and Examinations 2021–2025

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2021 – 22)

VIII SEMESTER (Physics major)

Sl. No	Course and Course Code		Course Title	Teaching Department	Teaching Hours/Week				Examination				Credits
					Theory Lecture	Tutorial	Practical	Self-Study Component	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P	S					
1	DC	21BSP81	Advanced Quantum Mechanics	Physics	2	2	--		03	50	50	100	3
2	DC	21BSP82	Electrodynamics	Physics	2	2			03	50	50	100	3
3	DC	21BSPL83	General Physics Laboratory	Physics	1	--	2		03	50	50	100	2
4	DSE	21BSP841	Thermoelectric Materials Devices	Physics	2	2			03	50	50	100	3
		21BSP842	Quantum Computing and Logic										
5	DC	21BSPR85	Research Project 2, Phase-2	Physics		6*			03	50	50	100	6
6	NCMC	21NSP86	NSS and PE	NSS and PE	Completed during the intervening period of III semester to VIII semester.				--	50	50	100	--
		21NSF86	NSS and Fine Arts	NSS and Humanities									
Total					07	12	2		12	300	300	600	17

Note:	(1)	DC: Discipline Course, DSE: Discipline Specific Elective *Refer to contact hours between student and guide.
	(2)	Research Project 2, Phase 2 – This semester end examination of research project phase 2 will have the submission of research project report and viva voce presentation The research projects shall be considered as head of passing for the award of the degree. Those who do not take up/complete the research projects shall be declared fail and shall have to complete the research project 2 during the subsequent examination/s, after satisfying the project requirements.

Non-credit mandatory courses (NCMC):**National Service Scheme/Physical Education (Sport and Athletics)/Yoga/Fine Arts:**

- (1) Securing 40 % or more in CIE, 35 % or more marks in SEE, and 40 % or more in the sum total of CIE + SEE leads to successful completion of the registered course.
- (2) In case, students fail to secure 35% marks in SEE, they have to appear for SEE during the subsequent examinations conducted by the University.
- (3) In case, any student fails to register for NSS, PE or Yoga/fails to secure the minimum 40 % of the prescribed CIE marks, he/she shall be deemed to have not completed the requirements of the course. In such a case, the student has to fulfill the course requirements during subsequently to earn the qualifying CIE marks subject to the maximum program period.
- (4) Successful completion of the course shall be indicated as satisfactory in the grade card. Non-completion of the course shall be indicated as Unsatisfactory.
- (5) These courses shall not be considered for vertical progression as well as for the calculation of SGPA and CGPA, but completion of the courses shall be mandatory for the award of a degree.