

Semester	Course Type & Course Code	Name of the Course	Credit	Lect.	Tuto.	Pract. / Viva	Full Marks	Distribution of Marks		
								Theory	Pract./Tuto/Viva-Voice	Internal Assessment
VIII For UG Hons. With Research Project/ Dissertation	Major/DS Course (Core) BCA8011	Network Security & Cryptography	6	4	0	2	75	40	20	15
	Minor Course BCA 8021	Operations Research / MOOCS Course* (Only for BCA students)	4	3	1	0	75	60	0	15
	Research Project BCA8091	Research Project/ Dissertation	12	0	0	12	225	Seminar Presentation, Preparation & Submission of Research Project/Dissertation-135+ Viva-90		
VIII For UG Hons. Without Research Project/ Dissertation	Major/DS Course (Core) BCA 8011	Network Security & Cryptography	6	4	0	2	75	40	20	15
	Major/DS Course (Core) BCA 8012	Computer Graphics	4	3	0	1	75	40	20	15
	Major/DS Course (Core) BCA8013	Machine Learning	4	3	0	1	75	40	20	15
	Major/DS Course (Core) BCA 8014	System Programming Using UNIX/Linux	4	3	0	1	75	40	20	15
	Minor Course BCA 8021	Operations Research (Only for BCA students)	4	3	1	0	75	60	0	15
	Total		22				375			

*At least 4 Credit or 16 weeks course from MOOCS platform like SWAYAM , NPTEL , Udeamy , Coursera, edX etc. on relevant discipline can be taken subject to the approval of concerned academic department.

Honours students not undertaking research will do 3 courses for 12 credits in lieu of a research project / Dissertation.

Students will be awarded UG Degree BCA (Honours/ Honours with Research) in the relevant Discipline / Subject provided they secure 178 credits.

Students who secure a minimum of 7.5 CGPA in the first six semesters and wish to undertake research at the undergraduate level can choose Honours with research degree in the fourth year. They should do a research project or dissertation under the guidance of a faculty member of the concerned Department of the University/ Institute. The research project/dissertation will be in the major discipline, Computer Application. The students who secure 12 credits from a research project/dissertation, will be awarded UG Degree in BCA(Honours with Research).