Vivekanand College, Kolhapur (Empowered Autonomous)

Department of B.Sc. Computer Science Entire

Course Structure under Three- Years UG Program

Department/Subject Specific Core or Major (DSC)

(as per NEP-2020 guidelines)

1. **Title: Three Years UG degree in B.Sc. computer science entire**
2. **Year of implementation:** academic year 2023-24 onwards
3. **Examination pattern:** semester wise for Theory and Practicals
4. **Structure of program:**

B.Sc. Computer Science entire-I Semester- I & II

Sr. No.	Course Abbr.	Course code	Course Name	Teaching Scheme Hours/week		Examination Scheme and Marks				Course Credits
				TH	PR	ESE	CIE	PR	Marks	
Semester-I										
1	DSC-I	DSC06COM11	Introduction to computers-I	2	-	40	10	-	50	2
2	DSC-II	DSC06COM12	Programming in C-I	2	-	40	10	-	50	2
3	MIN-I	MIN06ELE11	Analog Electronics	2	-	40	10	-	50	2
4	MIN-II	MIN06ELE12	Digital Electronics-I	2	-	40	10	-	50	2
5	OEC-I	OEC06MAT11	Foundational Maths	2	-	40	10	-	50	2
6	OEC-II	OEC06STA11	Descriptive Statistics-I	2	-	40	10	-	50	2
7	AEC-I	AEC06ENG11	Business Communication-I	2	-	40	10	-	50	2
8	IKS-I	IKS06GEC11	Indian knowledge System	2	-	25	-	-	25	2
9	DSC-PR-I	DSC06COM19	DSC Computer Lab-1	-	4	-	-	25	25	2
10	MIN-PR-I	MIN06ELE19	MIN Electronics Lab-1	-	4	-	-	25	25	2
11	OEC-PR-I	OEC06MAT19	OEC Maths Lab-1	-	2	-	-	25	25	1
12	OEC-PR-I	OEC06STA19	OEC StatisticsLab-1	-	2	-	-	25	25	1
	Total (Semester-I)			**16**	**12**	**305**	**70**	**100**	**475**	**22**
Semester-II										
1	DSC-III	DSC06COM21	Introduction to computers-II	2	-	40	10	-	50	2
2	DSC-IV	DSC06COM22	Programming in C- II	2	-	40	10	-	50	2
3	MIN-III	MIN06ELE21	Instrumentation	2	-	40	10	-	50	2
4	MIN-IV	MIN06ELE22	Digital Electronics-II	2	-	40	10	-	50	2

5	OEC-III	OEC06MAT21	Operational Research	2	-	40	10	-	50	2
6	OEC-IV	OEC06STA21	Descriptive Statistics-II	2	-	40	10	-	50	2
7	AEC-II	AEC06ENG21	Business Communication-II	2	-	40	10		50	2
8	SEC-II	SEC06STA21	Introduction to Excel	-	4	-	-	25	25	2
9	DSC-PR-II	DSC06COM29	DSC Computer Lab-2	-	4	-	-	25	25	2
10	MIN-PR-II	MIN06ELE29	MIN Electronics Lab-2	-	4	-	-	25	25	2
11	OEC-PR-II	OEC06MAT29	OEC Maths Lab-2	-	2	-	-	25	25	1
12	OEC-PR-II	OEC06STA29	OEC StatisticsLab-2	-	2	-	-	25	25	1
	Total (Semester-II)			**14**	**16**	**280**	**70**	**125**	**475**	**22**
	Cumulative Total (1st Year)			**30**	**28**	**585**	**140**	**225**	**950**	**44**

B.Sc. Computer Science Entire –II Semester- III & IV

Sr. No.	Course Abbr.	Course code	Course Name	Teaching Scheme Hours/week		Examination Scheme and Marks				Course Credits
				TH	PR	ESE	CIE	PR	Marks	
Semester-III										
1	DSC-V	DSC06COM31	OOP with C++	2	-	40	10	-	50	2
2	DSC-VI	DSC06COM32	RDBMS with SQL Server	2	-	40	10	-	50	2
3	MIN-V	MIN06ELE31	8051 Microcontroller	2	-	40	10	-	50	2
4	SEC-III	SEC06STA31	Introduction to R	-	4	-	-	25	25	2
5	SEC-IV	SEC06STA32	Statistical methods using R	-	4	-	-	25	25	2
6	AEC-III	AEC06ENG31	Communication Skills -I	2	-	40	10	-	50	2
7	VEC-I	VEC06DEG31	Democracy, Election and Good Governance(DEGG)	2	-	50	-	-	50	2
8	VEC-II	VEC06EVS31	Environmental Science	2	-	35	-	15	50	2
9	DSC-PR-III	DSC06COM39	DSC Computer Lab-3	-	8	-	-	50	50	4
10	MIN-PR-III	MIN06ELE39	MIN Electronics Lab-3	-	4	-	-	25	25	2
	Total (Semester-III)			**12**	**20**	**245**	**40**	**140**	**425**	**22**
Semester-IV										
1	DSC-VII	DSC06COM41	Data structure	2	-	40	10	-	50	2
2	DSC-VIII	DSC06COM42	Advanced Web Technology	2	-	40	10	-	50	2
3	MIN-VI	MIN06ELE41	Raspberry Pi	2	-	40	10	-	50	2

4	SEC-V	SEC06STA41	Statistical methods using MINITAB	-	4	-	-	25	25	2
5	SEC-VI	SEC06STA42	Statistical methods using PYTHON	-	4	-	-	25	25	2
6	AEC-IV	AEC06ENG41	Communication Skills -II	2	-	40	10	-	50	2
7	VEC-III	VEC06EVS41	Environmental Science	2	-	35	-	15	50	2
8	CC	CC06	Co- Curricular Courses	2	-	50	-	-	50	2
9	DSC-PR-IV	DSC06COM49	DSC Computer Lab-4	-	8	-	-	50	50	4
10	MIN-PR-IV	MIN06ELE49	MIN Electronics Lab-4	-	4	-	-	25	25	2
	Total (Semester-IV)			**12**	**20**	**245**	**40**	**140**	**425**	**22**
	Cumulative Total (2nd Year)			**24**	**40**	**490**	**80**	**280**	**850**	**44**

B.Sc.-Computer Science entire-III Semester-V&VI

Sr. No.	Course Abbr.	Course code	Course Name	Teaching Scheme Hours/week		Examination Scheme and Marks				Course Credits
				TH	PR	ESE	CIE	PR	Marks	
Semester-V										
1	DSC-IX	DSC06COM51	Operating System	2	-	40	10	-	50	2
2	DSC-X	DSC06COM52	Core Java	2	-	40	10	-	50	2
3	DSC-XI	DSC06COM53	C# Programming	2		40	10	-	50	2
4	DSC-XII	DSC06COM54	PHP Programming	2	-	40	10	-	50	2
5	DSE-I	DSE06COM51	Software engineering with UML OR	2	-	40	10	-	50	2
		DSE06COM52	E-Commerce							
6	MIN-VII	MIN06ELE51	Introduction to IOT	2	-	40	10	-	50	2
7	FP	FPR06COM51	Field Project	-	-	-	-	50	50	2
8	DSC-PR-VA	DSC06PRA59	DSC Computer Lab-5A	-	8	-	-	50	50	4
9	DSC-PR-VB	DSC06PRB59	DSC Computer Lab-5B	-	8	-	-	50	50	4
	Total (Semester-V)			**12**	**16**	**240**	**60**	**150**	**450**	22
Semester-VI										
1	DSC-XIII	DSC06COM61	Linux OS	2	-	40	10	-	50	2
2	DSC-XIV	DSC06COM62	Advanced Java	2	-	40	10	-	50	2
3	DSC-V	DSC06COM63	Advanced C#	2	-	40	10	-	50	2

4	DSC-XVI	DSC06COM64	Android Programming	2	-	40	10	-	50	2
5	DSE-II	DSE06COM61	Artificial Intelligence OR	2	-	40	10	-	50	2
		DSE06COM61	Data Mining							
6	MIN-VIII	MIN06ELE61	Computer Networks	2	-	40	10	-	50	2
7	OJT	OJT06COM61	On Job Training	-	-	-	-	50	50	2
8	DSC-PR-VIA	DSC06PRA69	DSC Computer Lab-6A	-	8	-	-	50	50	4
9	DSC-PR-VIB	DSC06PRB69	DSC Computer Lab-6B	-	8	-	-	50	50	4
	Total (Semester-VI)			**12**	**16**	**240**	**60**	**150**	**450**	**22**
	Cumulative Total (3rd Year)			**24**	**32**	**480**	**120**	**300**	**900**	**44**
	Three Years UG degree in B.Sc. computer science entire								**2700**	**132**

Abrr. TH-Theory, PR-Practical, ESE- End Semester Examination, CIE-Continuous Internal Examination

Note:
Minimum passing for 25 marks Theory paper = 10 marks
Minimum passing for 35 marks Theory paper = 14 marks
Minimum passing for 40 marks Theory paper = 16 marks
Minimum passing for 10 marks Internal evaluation = 04 marks
Minimum passing for 25 marks Practical = 10 marks
Minimum passing for 50 marks Practical = 20 marks
Separate passing for every head- ESE, CIE and Practicals