I Semester Scheme of Studies - Diploma in Computer Science &Engineering [C-20]

S.N	Course Category / Teaching Department	Course Code	Course Title	Hours per week			Total contact hrs /week	Credits	CIE Marks		SEE Marks		Total Marks	Min Marks for Passing (including CIE)	Assigned Grade	Grade Point	SGPA and CGPA
				L	T	P			Max	Min	Max	Min					
THEORY COURSES																	
1	BS/SC	20SC01T	Engineering Mathematics	4	0	0	4	4	50	20	50	20	100	40			Only SGPA for 1st Semester
2	ES/CS	20CS11T	Fundamentals of Computer	4	0	0	4	4	50	20	50	20	100	40			
PRACTICAL COURSES																	
3	ES/EE/EC	20EC01P	Fundamentals of Electrical & Electronics Engineering	2	0	4	6	4	60	24	40	16	100	40			
4	ES/CS	20CS01P	IT Skills	2	0	4	6	4	60	24	40	16	100	40			
AUDIT COURSES																	
5	AU/SC	20AU01T	Environment Sustainability	2	0	0	2	2	50	20	-	-	50	20			
6	AU Physical Activity		Sports/NCC/NSS/Youth Red Cross/Yoga/ Technical club.	Student shall enrol in any one of these activities in 1st semester and shall participate actively. The student shall obtain 'Participation Certificate' in the activity to get eligible for the award of Diploma.													
	Total			14	0	8	22	18	270	108	180	72	450	180			

T:- Theory   P:- Practical D:- Drawing E:- Elective BS- Basic Science:: ES-Engineering Science:: HS-Humanities & Social Science:: AU-Audit Course

Note:

1. Assigned Grade, Grade Point, SGPA and CGPA to be recorded in the Grade/Marks card.
2. AU- Physical Activity- Student participation in the selected physical activity shall be monitored and the participation record shall be maintained by the respective Programme Coordinator (Head of Section).
3. Theory course Semester End Examination (SEE) is conducted for 100 marks (3 Hours duration)
4. Practical course CIE and SEE is conducted for 100 marks (3 Hours duration)

II Semester Scheme of Studies - Diploma in Computer Science & Engineering [C-20]

Sl. No	Course Category / Teaching Department	Course Code	Course Title	Hours per week			Total contact hrs/week	Credits	CIE Marks		SEE Marks		Total Marks	Min Marks for Passing (including CIE marks)	Assigned Grade	Grade Point	SGPA and CGPA
				L	T	P			Max	Min	Max	Min					
THEORY COURSES																	S
1	SC	20PM01T	Project Management Skills	2	0	4	6	4	50	20	50	20	100	40			
PRACTICAL COURSES																	
2	BS/SC	20SC02P	Statistics and Analytics	2	0	4	6	4	60	24	40	16	100	40			
3	HS/EG/CS	20EG01P	Communication Skills	2	0	4	6	4	60	24	40	16	100	40			
4	ES/ME	20ME02P	Computer Aided Engineering Graphics	2	0	4	6	4	60	24	40	16	100	40			
5	ES/CS	20CS21P	Multimedia & Animation	2	0	4	6	4	60	24	40	16	100	40			
AUDIT COURSES																	
6	AU/CS	20KA21T	Kannada-I/ಸಾಹಿತ್ಯ ಸಿಂಚನ – I /ಬಳಕೆ ಕನ್ನಡ – I	2	0	0	2	2	50	20	-	-	50	20			
Total				12	0	20	32	22	340	136	210	84	550	220			

T:- Theory   P:- Practical D:- Drawing E:- Elective BS- Basic Science:: ES-Engineering Science:: HS-Humanities & Social Science:: AU-Audit Course

Note:

1. Assigned Grade, Grade Point, SGPA and CGPA to be recorded in the Grade/Marks card.
2. Theory course Semester End Examination (SEE) is conducted for 100 marks (3 Hours duration)
3. Practical course CIE and SEE is conducted for 100 marks (3 Hours duration)

Government of Karnataka
DEPARTMENT OF COLLEGIATE AND TECHNICAL EDUCATION

Curriculum Structure

III Semester Scheme of Studies- Diploma in Computer Science and Engineering

Sl. No.	Course Category / Teaching Department	Course Code	Course Name	Hours per week			Total contact hrs /week	Credits	CIE Marks		SEE Marks		Total Marks	Min Marks for Passing (including CIE marks)	Assigned Grade	Grade Point	SGPA and CGPA
				L	T	P			Max	Min	Max	Min					
Integrated Courses																	
1	PC/CS	20CS31P	Python Programming	3	1	4	8	6	60	24	40	16	100	40			Both SGPA & CGPA
2	PC/CS	20CS32P	Computer Hardware, Maintenance and Administration	3	1	4	8	6	60	24	40	16	100	40			
3	PC/CS	20CS33P	Computer Networks	3	1	4	8	6	60	24	40	16	100	40			
4	PC/CS	20CS34P	Database System Concepts and PL/SQL	3	1	4	8	6	60	24	40	16	100	40			
Audit Course																	
5	AU/KA	20KA31T	ಸಾಹಿತ್ಯ ಸಿಂಚನ-II/ ಬಳಕೆ ಕನ್ನಡ-II	2	0	0	2	2	50	20	-	-	50	20			
			Total	14	4	16	34	26	290	116	160	64	450	180			

*PC: Programme Core:: AU-Audit Course:: KA: Kannada:: L: Lecture:: T: Tutorial:: P: Practice

IV Semester Scheme of Studies- Diploma in Computer Science and Engineering

Sl. No.	Course Category / Teaching Department	Course Code	Course Name	Hours per week			Total contact hrs /week	Credits	CIE Marks		SEE Marks		Total Marks	Min Marks for Passing (including CIE marks)	Assigned Grade	Grade Point	SGPA and CGPA
				L	T	P			Max	Min	Max	Min					
			Integrated Courses														
1	PC/CS	20CS41P	Data structures with Python	3	1	4	8	6	60	24	40	16	100	40			Both SGPA & CGPA
2	PC/CS	20CS42P	Operating System and Administration	3	1	4	8	6	60	24	40	16	100	40			
3	PC/CS	20CS43P	Object Oriented Programming and Design with Java	3	1	4	8	6	60	24	40	16	100	40			
4	PC/CS	20CS44P	Software Engineering principles and practices	3	1	4	8	6	60	24	40	16	100	40			
			Audit Course														
5	AU/CS	20CS45T	Indian Constitution	2	0	0	2	2	50	20	-	-	50	20			
			Total	14	4	16	34	26	290	116	160	64	450	180			

*PC: Programme Core:: AU-Audit Course:: L: Lecture:: T: Tutorial:: P: Practice

V Semester Scheme of Studies - Diploma in Computer Science and Engineering [C-20]

Programme Specialization Pathway

Pathway	Course Category / Teaching Department	Course Code	Pathway Title	Hours per Semester L	T	P	Total contact hrs /Semester	Credits	CIE Marks Max	Min	SEE-1 Marks (Theory) Max	Min	SEE-2 Mark (Practical) Max	Min	Total Marks	Min Marks for Passing (including CIE marks)	Assigned Grade	Grade Point	SGPA and CGPA
1	CSE Specialization pathways in emerging areas Student may select any one of the specializations	20CS51I	1. Artificial Intelligence and Machine Learning	104	52	312	468	24	240	96	60	24	100	40	400	160			Both SGPA & CGPA
		20CS52I	2. Full Stack Development	104	52	312	468	24	240	96	60	24	100	40	400	160			
		20CS53I	3. Cloud Computing	104	52	312	468	24	240	96	60	24	100	40	400	160			
		20CS54I	4. Cyber Security	104	52	312	468	24	240	96	60	24	100	40	400	160			

Science and Research Pathway

Pathway	Course Category / Teaching Department	Course Code	Pathway Title	L	T	P	Total	Credits	CIE Marks Max	Min	SEE Marks Max	Min	Total Marks	Min Marks for Passing			
2	BS/SC/CSE Specialization pathway in Science and Research (Student need to take all four papers in this pathway)	20SC51T	Paper 1-Applied Mathematics	52	26	0	78	6	50	20	50	20	100	40			
		20SC52T	Paper 2 – Applied Science	52	0	52	104	6	50	20	50	20	100	40			
		20RM53T	Paper 3 – Research Methodology	52	0	52	104	6	50	20	50	20	100	40			
		20TW54P	Paper 4 – Technical Writing	39	13	52	104	6	60	24	40	16	100	40			
			Total	195	39	156	390	24	210	84	190	76	400	160			

Entrepreneurship Pathway

Pathway	Course Category / Teaching Department	Course Code	Pathway Title	L	T	P	Total	Credits	CIE Max	Min	SEE Max	Min	Total Marks	Min Marks for Passing			
3	ES/CSE	20ET51I	Entrepreneurship and Start up	104	52	312	468	24	240	96	160	64	400	160			

L:- Lecture   T:- Tutorial P:- Practical BS- Basic Science:: ES-Engineering Science:: SC: Science , I: Integrated :: CS: Computer Science and Engineering

Note : In 5th Semester student need to select any one of the pathways consisting of 24 credits

Students can continue their higher education irrespective of the pathways selected.

VI Semester Scheme of Studies - Diploma in Computer Science and Engineering [C-20]															
Pathway	Course Category / Teaching Department	Course Code	Pathway	Course		Total contact	Credits	CIE Marks		SEE Marks		Total Marks	Min Marks for Passing	Assigned Grade	Grade	SGPA and CGPA
								Max	Min	Max	Min					
Internship	ES/CSE	20CS61S	Specialisation pathway	Internship/ project	40 Hours / week Total 16 Weeks	640	16	240	96	160	64	400	160			
		20CS61R	Science and Research Pathway	Research project	40 Hours / week Total 16 Weeks	640	16	240	96	160	64	400	160			
		20CS61E	Entrepreneurship and Start up pathway	Minimum Viable Product - MVP/ Incubation/ Startup proposal	40 Hours / week Total 16 Weeks	640	16	240	96	160	64	400	160			

Note : Student shall undergo Internship/Project/research project/MVP/Incubation/Startup proposal in the same area as opted

in 5th semester pathway.