

SDM College of Engineering and Technology, Dharwad – 580002

Department of Computer Science and Engineering

2015 Scheme

I Semester B.E.

Physics cycle

Course Code	Course Title	Teaching		Examination				
		L-T-P-S (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical(SEE)	
				Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
15UMAC100	Engineering Mathematics-I	4 - 0 - 0 - 0	4	50	100	3	-	-
15UEEC100	Basic Electrical Engineering	4 - 0 - 0 - 0	4	50	100	3	-	-
15UPHC100	Engineering Physics	4 - 0 - 0 - 0	3	50	100	3	-	-
15UPHL100	Engineering Physics Lab	0 - 0 - 2 - 0	3	50	100	3	-	-
15UMEC100	Elements of Mechanical Engineering	3 - 0 - 0 - 2	2	50	100	--	-	-
15UMEL100	Workshop Practice	0 - 0 - 2 - 0	1	50	--	--	50	3
15UCVC100	Engineering Mechanics	4 - 0 - 0 - 4	1	50	--	--	50	3
15UHUA101	Kannada	2 - 0 - 0 - 0	1	100	-	2		
15UHUA102	Constitution of India & Professional Ethics	2 - 0 - 0 - 0	Audit	100	--	--	--	--
<u>Total</u>		<u>23 - 0 - 4 - 6</u>	22	550	500		100	

Chemistry cycle

Course Code	Course Title	Teaching		Examination				
		L-T-P-S (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
15UMAC100	Engineering Mathematics-I	4 - 0 - 0 - 0	4	50	100	3	-	-
15UECC100	Basic Electronics	4 - 0 - 0 - 0	4	50	100	3	-	-
15UCYC100	Engineering Chemistry	4 - 0 - 0 - 0	4	50	100	3	-	-
15UCYL100	Engineering Chemistry Lab	0 - 0 - 2 - 0	1	50	100	3	-	-
15UCSC100	Problem Solving & Programming in C	4 - 0 - 0 - 0	4	50	--	-	50	3
15UCSL100	Problem Solving & Programming in C Lab	0 - 0 - 2 - 0	1	50	--	--	50	3
15UMEC101	Computer Aided Engineering Drawing	2 - 0 - 2 - 4	4	50	--	--	50	3
15UHUC100	Functional English	2 - 0 - 0 - 0	2	50	100	2	--	--
15UHUA103	Environmental Science	2 - 0 - 0 - 0	Audit	100	--	--	--	--
<u>Total</u>		<u>22 - 0 - 6-4</u>	24	500	500		150	

II Semester B.E.

Physics cycle

Course Code	Course Title	Teaching		Examination				
		L-T-P-S (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical(SEE)	
				Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
15UMAC200	Engineering Mathematics-II	4 - 0 - 0 - 0	4	50	100	3	-	-
15UEEC200	Basic Electrical Engineering	4 - 0 - 0 - 0	4	50	100	3	-	-
15UPHC200	Engineering Physics	4 - 0 - 0 - 0	3	50	100	3	-	-
15UPHL200	Engineering Physics Lab	0 - 0 - 2 - 0	3	50	100	3	-	-
15UMEC200	Elements of Mechanical Engineering	3 - 0 - 0 - 2	2	50	100	--	-	-
15UMEL200	Workshop Practice	0 - 0 - 2 - 0	1	50	--	--	50	3
15UCVC200	Engineering Mechanics	4 - 0 - 0 - 4	1	50	--	--	50	3
15UHUA201	Kannada	2 - 0 - 0 - 0	1	100	-	2		
15UHUA202	Constitution of India & Professional Ethics	2 - 0 - 0 - 0	Audit	100	--	--	--	--
<u>Total</u>		<u>23 - 0 - 4 - 6</u>	22	550	500		100	

Chemistry cycle

Course Code	Course Title	Teaching		Examination				
		L-T-P-S (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
15UMAC200	Engineering Mathematics-II	4 - 0 - 0 - 0	4	50	100	3	-	-
15UECC200	Basic Electronics	4 - 0 - 0 - 0	4	50	100	3	-	-
15UCYC200	Engineering Chemistry	4 - 0 - 0 - 0	4	50	100	3	-	-
15UCYL200	Engineering Chemistry Lab	0 - 0 - 2 - 0	1	50	100	3	-	-
15UCSC200	Problem Solving & Programming in C	4 - 0 - 0 - 0	4	50	--	-	50	3
15UCSL200	Problem Solving & Programming in C Lab	0 - 0 - 2 - 0	1	50	--	--	50	3
15UMEC201	Computer Aided Engineering Drawing	2 - 0 - 2 - 4	4	50	--	--	50	3
15UHUC200	Functional English	2 - 0 - 0 - 0	2	50	100	2	--	--
15UHUA203	Environmental Science	2 - 0 - 0 - 0	Audit	100	--	--	--	--
<u>Total</u>		<u>22 - 0 - 6-4</u>	24	500	500		150	

III Semester

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
15UMAC300	Engg.Mathematics-III	4-0-0	4	50	100	3	-	-
15UCSC300	Digital Electronics	4-0-0	4	50	100	3	-	-
15UCSC301	Discrete Structures in Computer Science	4-0-0	4	50	100	3	-	-
15UCSC302	Data Structures	4-0-0	4	50	100	3	-	-
15UCSC303	Computer Organization	4-0-0	4	50	100	3	-	-
15UCSL304	Unix Shell Programming	0-2-2	2	50	-	-	50	3
15UCSL305	Digital Electronics Laboratory	0-0-3	1.5	50	-	-	50	3
15UCSL306	Data Structures Laboratory	0-0-3	1.5	50	-	-	50	3
Total		20-2-8	25	400	500	-	100	-

IV Semester

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
15UMAC400	Engineering Mathematics-IV	4-0-0	4	50	100	3	-	-
15UCSC400	Microcontroller	4-0-0	4	50	100	3	-	-
15UCSC401	Finite Automata and Formal Languages	4-0-0	4	50	100	3	-	-
15UCSC402	Object Oriented Programming	4-0-0	4	50	100	3	-	-
15UCSC403	Analysis and Design of Algorithms	3-0-2	4	50	100	3	-	-
15UCSC404	Operating Systems	4-0-0	4	50	100	3	-	-
15UCSL405	Object Oriented Programming Lab	0-0-3	1.5	50	--	-	50	3
15UCSL406	Microcontroller Lab	0-0-3	1.5	50	--	-	50	3
Total		23-0-8	27	400	600		100	

V Semester

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
15UCSC500	Data Communication	4-0-0	4	50	100	3	-	-
15UCSC501	Compiler Design	4-0-0	4	50	100	3	-	-
15UCSC502	Database Management Systems	4-0-0	4	50	100	3	-	-
15UCSC503	Software Engineering	4-0-0	4	50	100	3	--	--
15UCSC504	Unix System Programming	4-0-0	4	50	--	--	50	3
15UCSL505	System Software Lab	0-0-3	1.5	50	--	--	50	3
15UCSL506	DBMS Laboratory	0-0-3	1.5	50	--	--	--	--
Total		20-0-6	23	350	500	-	100	-

VI Semester

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
15UCSC600	Computer Networks	4-0-0	4	50	100	3	-	-
15UCSC601	Advanced Object Oriented Programming	4-0-0	4	50	100	3	-	-
15UCSC602	Object Oriented System Modeling and Design	4-0-0	4	50	100	3	-	-
15UCSL603	Industry Oriented Programming Practices	1-0-2	2	50	-	-	50	3
18UCSL604	Network Programming Lab	0-0-3	1.5	50	-	-	50	3
15UCSL605	Advanced Object Oriented Programming Lab	0-0-3	1.5	50	-	-	50	3
15UCSL606	Mini Project	0-0-8	4	50	-	-	50	3
15UCSE605	System Modeling and Simulation	3-0-0	3	50	100	3	-	-
15UCSE606	Digital Image Processing	3-0-0	3	50	100	3	-	-
15UCSE607	Advanced Data Structures and Algorithms	3-0-0	3	50	100	3	-	-
15UCSE608	Artificial Intelligence	3-0-0	3	50	100	3	-	-
15UCSE609	Pattern Recognition	3-0-0	3	50	100	3	-	-
15UCSE610	Principles of Programming Languages	3-0-0	3	50	100	3	-	-
15UCSE611	Web Technologies	3-0-0	3	50	100	3	-	-
15UCSE612	Mobile Application Development	3-0-0	3	50	100	3	-	-
Total		19 - 0 -16	27	450	500	-	200	

VII Semester

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
15UCSC700	Engineering Management, Enterpreunership, & IPR.	4-0-0	4	50	100	3	-	-
15UCSC701	Advanced Computer Architecture	4-0-0	4	50	100	3	-	-
15UCSC702	Computer Graphics	3-0-2	4	50	100	3	-	-
15UCSL703	Major Project Phase-1	0- 0 -8	4	50	-	-	50	3
15UCSE705	Software Testing	3-0-0	3	50	100	3	-	-
15UCSE706	Ad-hoc Networks	3-0-0	3	50	100	3	-	-
15UCSE707	Operations Research	3-0-0	3	50	100	3	-	-
15UCSE708	Internet of Things	3-0-0	3	50	100	3	-	-
15UCSE709	Multicore Architecture and Programming	3-0-0	3	50	100	3	-	-
15UCSE710	Embedded Systems	3-0-0	3	50	100	3	-	-
Total		20 - 0 - 10	25	350	600	-	50	-

VIII Semester

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
15UCSC800	Distributed Systems	4 - 0 - 0	4	50	100	3	-	-
15UCSC801	Independent study	0 - 0 - 4	2	50	-	-	-	-
15UCSL802	Major Project Phase-2	0-0 -20	10	50	-	-	50	3
15UCSE803	Data Warehousing and Mining	3-0-0	3	50	100	3	-	-
15UCSE804	Cryptography and Network Security	4-0-0	4	50	100	3	-	-
15UCSE805	Cloud Computing	4-0-0	4	50	100	3	-	-
15UCSE806	Mobile Computing	3-0-0	3	50	100	3	-	-
15UCSE807	Network Management	4-0-0	4	50	100	3	-	-
15UCSE808	Ontology and Semantic Web	3-0-0	3	50	100	3	-	-
15UCSE809	Big Data Analytics	4-0-0	4	50	100	3	-	-
Total		15- 0 - 24	27	300	400	--	50	--

SDM College of Engineering and Technology, Dharwad – 580002

Department of Computer Science and Engineering

2018 Scheme

I/II semester B. E. (Common to all Branches)

Physics cycle

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
18UMAC100	BS	Engineering Mathematics-I	3 - 2 - 0	4	50	100	3	-	-
18UPHC100	BS	Engineering Physics	3 - 2 - 0	4	50	100	3	-	-
18UEEC100	ES	Basic Electrical Engineering	3 - 0 - 0	3	50	100	3	-	-
18UCVC100	ES	Engineering Mechanics	3 - 0 - 0	3	50	100	3	-	-
18UMEC100	ES	Elements of Mechanical Engineering	2 - 0 - 0	2	50	50	2	-	-
18UPHL100	BS	Engineering Physics Lab	0 - 0 - 2	1	50	--	--	50	3
18UESL100	ES	Basic Engineering Skills Lab	0 - 0 - 2	1	50	--	--	50	3
18UHUC100	HU	Kannada	2- 0 -0	1	50	50	2		
18UHUA100	HU	Constitution of India & Professional Ethics	2- 0 - 0	Audit	100	--	--	--	--
Total			18 - 4 - 4	19	500	500		100	

Chemistry cycle

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
18UMAC100	BS	Engineering Mathematics-I	3 - 2 - 0	4	50	100	3	--	--
18UCYC100	BS	Engineering Chemistry	3 - 2 - 0	4	50	100	3	--	--
18UECC100	ES	Basic Electronics	3 - 0 - 0	3	50	100	3	--	--
18UCSC100	ES	Problem Solving & Programming in C	3 - 2 - 0	4	50	100	3	--	--
18UMGC100	ES	Engineering Graphics	2 - 0 - 2	3	50	100	3	--	--
18UCYL100	BS	Engineering Chemistry Lab	0 - 0 - 2	1	50	--	--	50	3
18UCSL100	ES	Problem Solving & Programming in C Lab	0 - 0 - 2	1	50	--	--	50	3
18UHUC101	HU	Functional English	2 - 0 - 0	1	50	50	2	--	--
18UHUA102	HU	Environmental Science	2 - 0 - 0	Audit	100	--	--	--	--
Total			18 - 6 - 6	21	500	550		100	

III Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
18UMAC300	BS	Engg. Mathematics-III	3-0-0	3	50	100	3	-	-
18UCSC300	PC	Digital Electronics	4-0-0	4	50	100	3	-	-
18UCSC301	PC	Discrete Structures in Computer Science	3-2-0	4	50	100	3	-	-
18UCSC302	PC	Data Structures and Applications	4-0-0	4	50	100	3	-	-
18UCSC303	PC	Computer Organization and Architecture	3-0-0	3	50	100	3	--	--
18UCSC304	PC	Introduction to Unix Operating Systems	2-0-2	3	50	100	3	--	--
18UCSL305	PC	Digital Electronics Laboratory	0-0-3	1.5	50	--	--	50	3
18UCSL306	PC	Data Structures and Applications Laboratory	0-0-3	1.5	50	--	--	50	3
Total			19-2-8	24	400	600	-	100	-

IV Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
18UMAC400	BS	Engineering Mathematics-IV	3-0-0	3	50	100	3	-	-
18UCSC400	PC	ARM Processor	3-0-0	3	50	100	3	-	-
18UCSC401	PC	Finite Automata and Formal Languages	3-0-0	3	50	100	3	-	-
18UCSC402	PC	Object Oriented Programming	4-0-0	4	50	100	3	-	-
18UCSC403	PC	Analysis and Design of Algorithms	3-0-2	4	50	100	3	-	-
18UCSC404	PC	Operating Systems	4-0-0	4	50	100	3	-	-
18UCSL405	PC	Object Oriented Programming Lab	0-0-3	1.5	50	--	-	50	3
18UCSL406	PC	ARM Processor Lab	0-0-3	1.5	50	--	-	50	3
18UCSL407	PC	Introductory Project	0-0-2	1	50	--	--	--	--
Total			20-0-10	25	450	600		100	

V Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
18UHUC500	HU	Management, Entrepreneurship and IPR	4-0-0	4	50	100	3	-	-
18UCSC500	PC	Data Communication	4-0-0	4	50	100	3	-	-
18UCSC501	PC	Database Management Systems	4-0-0	4	50	100	3	-	-
18UCSC502	PC	Compiler Design and System Software	3-0-0	3	50	100	3	-	-
18UCSC503	PC	Software Engineering	3-0-0	3	50	100	3	--	--
18UCSL504	PC	Database Management Systems Lab	0-0-3	1.5	50	--	--	50	3
18UCSL505	PC	Compiler Design and System Software Lab	0-0-3	1.5	50	--	--	50	3
18UCSL506	PC	Minor Project-1	0-0-2	1	50	--	--	--	--
18UHUL507	HU	Soft skills/Aptitude	0-0-2	1	50	--	--	--	--
Elective Courses (One elective is to be chosen by the students)									
18UCSE508	PE	Advanced Object Oriented Programming	3-0-0	3	50	100	3	-	-
18UCSE509	PE	System Simulation and Modeling	3-0-0	3	50	100	3	-	-
18UCSE510	PE	Advanced Graph Theory	3-0-0	3	50	100	3	-	-
Total			21-0-10	26	500	600		100	

VI Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
18UCSC600	PC	Computer Networks	4-0-0	4	50	100	3	-	-
18UCSC601	PC	Object Oriented System Modeling and Design	4-0-0	4	50	100	3	-	-
18UCSL602	PC	Computer Networks Lab	0-0-3	1.5	50	-	-	50	3
18UCSL603	PC	Industry Oriented Programming Practices Lab	0-0-3	1.5	50	-	-	50	3
18UCSL604	PC	Minor Project-2	0-0-4	2	50	-	-	50	3
18UHUL605	HU	Soft skills/Aptitude	0-0-2	1	50	-	-	-	-
Elective Courses (Two Program Electives and One Open Elective are to be chosen by the students)									
18UCSE606	PE	Unix Systems Programming	3-0-0	3	50	100	3	-	-
18UCSO607	OE	Digital Image Processing	3-0-0	3	50	100	3	-	-
18UCSE608	PE	Principles of Programming	3-0-0	3	50	100	3	-	-
18UCSE609	PE	Data Mining	3-0-0	3	50	100	3	-	-
18UCSE610	PE	Advanced Data Structures and Algorithms	3-0-0	3	50	100	3	-	-
18UCSE611	PE	Pattern Recognition	3-0-0	3	50	100	3	-	-
18UCSO612	OE	Embedded Systems	3-0-0	3	50	100	3	-	-
Total			17 - 0 - 12	23	450	500		150	

VII Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration (Hrs)	Max. Marks	Duration (Hrs)
18UCSC700	PC	Artificial Intelligence and Machine Learning	4-0-0	4	50	100	3	-	-
18UCSC701	PC	Advanced Computer Architecture	4-0-0	4	50	100	3	-	-
18UCSL702	PC	Artificial Intelligence and Machine Learning Lab	0-0-2	1	50	--	--	50	3
18UCSL703	PC	Major Project Phase-1	0-0-4	2	50	--	--	50	3
18UCSL704	PC	Internship	4weeks	2	50	--	--	50	3
Elective Courses (Two electives, one Program Elective and one Open Elective, are to be chosen by the students)									
18UCSE705	PE	Computer Graphics	3-0-0	3	50	100	3	-	-
18UCSE706	PE	Software Testing	3-0-0	3	50	100	3	-	-
18UCSO707	OE	Web Technology	3-0-0	3	50	100	3	-	-
18UCSE708	PE	Ad-hoc Networks	3-0-0	3	50	100	3	-	-
18UCSE709	PE	Operations Research	3-0-0	3	50	100	3	-	-
18UCSE710	PE	Multicore Architecture and Programming	3-0-0	3	50	100	3	-	-
18UCSE711	OE	Internet of Things	2-0-2	3	50	100	3	-	-
Total			14 - 0 - 6	19	350	400	-	150	-

VIII Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration (Hrs)	Max. Marks	Duration (Hrs)
18UCSC800	PC	Distributed Systems and Applications	4 - 0 - 0	4	50	100	3	-	-
18UCSL801	PC	Independent study	0 - 0 - 2	1	50	-	-	-	-
18UCSL802	PC	Major Project Phase – 2	0 - 0 - 14	7	50	-	-	50	3
Elective Courses (Two electives, one Program Elective and one Open Elective, are to be chosen by the students)									
18UCSE803	PE	Cryptography and Network Security	3 - 0 - 0	3	50	100	3	-	-
18UCSO804	OE	Cloud Computing	3 - 0 - 0	3	50	100	3	-	-
18UCSE805	PE	Network Management	3 - 0 - 0	3	50	100	3	-	-
18UCSE806	PE	Mobile Applications Development	3 - 0 - 0	3	50	100	3	-	-
18UCSE807	PE	Ontology and Semantic Web	3 - 0 - 0	3	50	100	3	-	-
18UCSE808	PE	Data Science	3 - 0 - 0	3	50	100	3	-	-
18UCSE809	PE	Blockchain Technology	3 - 0 - 0	3	50	100	3	-	-
Total			10 - 0 - 16	18	250	300	--	50	--

SDM College of Engineering and Technology, Dharwad – 580002

Department of Computer Science and Engineering

2021 Scheme (NEP)

I/II semester B. E. (Common to all Branches)

Physics cycle

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UMAC100	BS	Engineering Mathematics-I	2 - 2 - 0	3	50	100	3	-	-
21UPHC100	BS	Engineering Physics	3 - 0 - 0	3	50	100	3	-	-
21UEEC100	ES	Basic Electrical Engineering	3 - 0 - 0	3	50	100	3	-	-
21UCVC100	ES	Elements of Civil Engineering and Mechanics	3 - 0 - 0	3	50	100	3	-	-
21UMEC100	ES	Elements of Mechanical Engineering	2 - 0 - 0	2	50	50	2	-	-
21UHUC100	HU	Functional English	1 - 2 - 0	2	50	50	2	-	-
21UPHL100	BS	Engineering Physics Lab	0 - 0 - 2	1	50	-	-	50	2
21UESL100	ES	Basic Engineering Skills Lab	0 - 0 - 2	1	50	-	-	50	2
21UAEE1XX	AE	Ability Enhancement Course	2- 0- 0	2	50	50	2	-	-
Total			16 – 4 - 4	20	450	550		100	

Chemistry cycle

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UMAC100	BS	Engineering Mathematics – I	2-2-0	3	50	100	3	-	-
21UCYC100	BS	Engineering Chemistry	3-0-0	3	50	100	3	-	-
21UECC100	ES	Basic Electronics	3-0-0	3	50	100	3	-	-
21UCSC100	ES	Problem Solving & Programming in C	3-0-0	3	50	100	3	-	-
21UMGC100	ES	Engineering Graphics	2-0-0	2	50	50	2	-	-
21UCYL100	BS	Engineering Chemistry Lab	0-0-2	1	50	-	-	50	2
21UCSL100	ES	Computer Programming Lab	0-0-2	1	50	-	-	50	2
21UAEE1XX	AE	Ability Enhancement Course	2-0-0	2	50	50	2	-	-
21UHUC101	HU	Society, Environment and Engineering	2 -0-0	2	50	50	2	-	-
Total			17 - 2 -4	20	450	550		100	

III Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UCSM300	BS	Engg.Mathematics-III	3-0-0	3	50	100	3	-	-
21UCSC300	PC	Digital Electronics	3-0-0	3	50	100	3	-	-
21UCSC301	PC	Data Structures and Applications	3-0-0	3	50	100	3	-	-
21UCSC302	PC	Computer Organization and Architecture	3-0-0	3	50	100	3	-	-
21UCSC303	PC	Operating Systems	3-0-0	3	50	100	3	-	-
21UAEE324	AE	Unix Administration and Programming	2-0-0	2	50	50	2	-	-
21UHUC300	HU	Universal Human Values - I	2-0-0	2	50	50	2	-	-
21UCSL304	PC	Digital Electronics Laboratory	0-0-3	1.5	50	-	-	50	3
21UCSL305	PC	Data Structures and Applications Laboratory	0-0-3	1.5	50	-	-	50	3
21UHUC301	HU	Kannada	2-0-0	1	50	50	2	-	-
21UMBA301	BS	Mathematics	3-0-0	Audit	50	-	-	-	-
Total			24-0-6	23	550	650	-	100	-

IV Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UCSM400	BS	Engineering Mathematics-IV	3-0-0	3	50	100	3	-	-
21UCSC400	PC	Programming Computer Peripherals and Interfacing	3-0-0	3	50	100	3	-	-
21UCSC401	PC	Object Oriented Programming	3-0-0	3	50	100	3	-	-
21UCSC402	PC	Analysis and Design of Algorithms	3-0-0	3	50	100	3	-	-
21UCSC403	PC	Software Engineering	3-0-0	3	50	100	3	-	-
21UHUA400	HU	The Constitution of India and Professional Ethics.	2-0-0	Audit	50	-	-	-	-
21UHUC402	HU	Universal Human Values – II	2-0-0	2	50	50	2	-	-
21UCSL405	PC	Object Oriented Programming Lab	0-0-3	1.5	50	-	-	50	3
21UCSL406	PC	Programming Computer Peripherals and Interfacing Lab	0-0-3	1.5	50	-	-	50	3
21UCSL407	PC	Introductory Project	0-0-2	1	50	-	-	-	-
21UMBA401	BS	Mathematics	3-0-0	Audit	50	-	-	-	-
Total			22-0-8	21	550	550		100	

Scheme-2022**Scheme of Teaching and Examinations – 2022
M.Tech., Computer Science and Engineering
I Semester M.Tech.**

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
22PRIC100	Research Methodology and IPR	3-0-0	3	50	100	3	-	-
22PCSC100	Applied Mathematics	4-0-0	4	50	100	3	-	-
22PCSC101	Advanced Algorithm	3-0-2	4	50	100	3	-	-
22PCSC102	Artificial Intelligence and Machine Learning	4-0-0	4	50	100	3	-	-
22PCSE1XX	Elective 1	3-0-2	4	50	100	3	-	-
22PCSL102	Artificial Intelligence and Machine Learning Lab	0-0-3	2	50	-	-	50	3
22PCSL103	Seminar	0-0-2	1	50	-	-	-	-
22PCSEOA1	**BOS recommended ONLINE course (NPTEL, MOOC)	-	Audit (PP)	-	-	-	-	-
Total		17-0-9	22	350	500		50	

List of Electives:

Course Code	Course Title	L-T-P
22PCSE125	<u>Image and Video Analytics</u>	3-0-2
22PCSE126	Soft Computing	3-0-2
22PCSE127	Block Chain Technology	3-0-2

Scheme of Teaching and Examinations – 2022
M.Tech., Computer Science and Engineering
II Semester M. Tech.

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
22PCSC200	Cryptography and Network Security	4-0-0	4	50	100	3	-	-
22PCSC201	Internet of Things	3-0-2	4	50	100	3	-	-
22PCSE2XX	Elective 2	3-0-0	3	50	100	3	-	-
22PCSE2XX	Elective 3	3-0-0	3	50	100	3	-	-
22PCSE2XX	Elective 4	3-0-0	3	50	100	3	-	-
22PCSL202	Cryptography and Network Security Lab	0-0-3	2	50	-	-	50	3
22PCSL203	Seminar	0-0-2	1	50	-	-	-	-
22PCSEOA2	**BOS recommended ONLINE course	-	Audit (PP)	-	-	-	-	-
Total		16-0-7	20	350	500		50	

List of Electives:

Sub Code	Subject Title	L-T-P
22PCSE225	Data science	3-0-0
22PCSE226	Deep Learning	3-0-0
22PCSE227	Data Visualization	3-0-0
22PCSE228	Wireless Networks & Mobile Computing	3-0-0
22PCSE229	Virtual Reality	3-0-0
22PCSE230	High Performance Computing	3-0-0
22PCSE231	Distributed Systems	3-0-0

Scheme of Teaching and Examinations – 2022
M.Tech., Computer Science and Engineering
III Semester M. Tech.

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
22PCSC300	Cloud Computing	4-0-0	4	50	100	3		
22PCSE3XX	Elective 5	3-0-0	3	50	100	3		
22PCSE3XX	Elective 6	3-0-0	3	50	100	3		
22PCSE3XX	Elective 7	3-0-2	4	50	100	3	-	-
OR								
22PCSL302	Internship in Industry or R&D organization	** Min 4 weeks during vacation after 2 nd sem	4	50	-	-	100	3
22PCSL303	*** Project phase 1	0-0-6	6	50	-	-	50	3
Total		13-0-8/10-4weeks-6)	20	250	400/300		50/150	

List of Electives:

Sub Code	Subject Title	L-T-P
22PCSE325	Data Stream Mining	3-0-2
22PCSE326	Software Defined Network	3-0-0
22PCSE327	Software Project Management	3-0-0
22PCSE328	Human Computer Interface	3-0-0
22PCSE329	Natural Language Processing and Text Mining	3-0-2
22PCSE330	Metaverse Fundamentals	3-0-0
22PCSE331	Sematic Web	3-0-0

Scheme of Teaching and Examinations – 2022
M.Tech., Computer Science and Engineering
IV Semester M. Tech.

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
22PCSL400	Project phase-II	0-0-22	18	100	--	--	100	3
Total		0-0-22	18	100	--	--	100	

Total Credits offered for the first year: 42
Total Credits offered for the Second year: 38

Scheme-2020**Scheme of Teaching and Examination
I Semester M. Tech**

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
20PRMIC100	Research Methodology and IPR	2-0-0	2	50	50	2		
20PMCSC100	Mathematical foundations of Computer Science	4-0-0	4	50	100	3		
20PCSEC101	Advanced algorithms	4-0-0	4	50	100	3		
20PCSEC102	Artificial Intelligence and Machine Learning	4-0-0	4	50	100	3		
20PCSEE1XX	Elective 1	3-0-2/ 4-0-0	4	50	100	3		
20PCSEL102	Artificial Intelligence & Machine Learning Lab	0-0-3	2	50			50	3
20PCSEL103	Seminar	0-0-2	1	50				
Total		17/18-0-7/5	21	350	450		50	



List of Electives

Course Code	Course Title	L-T-P
20PCSEE125	Image Processing and Computer Vision	3-0-2
20PCSEE126	Block Chain Technology	4-0-0

**Scheme of Teaching and Examination
II Semester M. Tech**

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
20PCSEC200	Advanced Computer Networks	4-0-0	4	50	100	3		
20PCSEC201	Distributed systems	4-0-0	4	50	100	3		
20PCSEE2XX	Elective 2	3-0-2	4	50	100	3		
20PCSEE2XX	Elective 3	3-0-2	4	50	100	3		
20PCSEE2XX	Elective 4	3-0-2	4	50	100	3		
20PCSEL202	Advanced Computer Networks Lab	0-0-3	2	50			50	3
20PCSEL203	Seminar	0-0-2	1	50				
Total		17-0-11	23	350	500		50	



List of Electives:

Sl. No	Course code	Course Title
1.	20PCSEE225	Internet of Things
2.	20PCSEE226	Deep Learning
3.	20PCSEE227	Data Science
4.	20PCSEE228	Wireless Networks & Mobile Computing
5.	20PCSEE229	Soft Computing
6.	20PCSEE230	Natural Language Processing and Text Mining

**Scheme of Teaching and Examination
III Semester M. Tech**

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
20PCSEC300	High Performance Computing	4-0-0	4	50	100	3		
20PCSEE3XX	Elective 5	3-0-0	3	50	100	3		
20PCSEE3XX	Elective 6	3-0-0	3	50	100	3		
20PCSEE3XX	Elective 7	3-0-0	3	50	100	3	--	--
OR								
20PCSEL302	Internship in Industry or R&D organization	** Min 4 weeks during vacation after 2 nd sem	3	50	--	--	100	3
20PCSEL303	*** Project phase 1	0-0-15	9	50			50	3
Total		13-0-15/ 10-4weeks-15)	22	250	400/ 300		50/150	



List of Electives:

Sl. No	Course code	Course Title
1.	20PCSEE325	Cloud Computing
2.	20PCSEE326	Software Defined Network
3.	20PCSEE327	Software Project Management
4.	20PCSEE328	Game Theory
5.	20PCSEE329	Human Computer Interface
6.	20PCSEE330	Applied Cryptography

Scheme of Teaching and Examination

IV Semester M. Tech

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
20PCSEL400	Project phase-II	0-0-20	22	100	--	--	100	3
Total		0-0-20	22	100	--	--	100	

Total Credits offered for the first year: 44

Total Credits offered for the Second year: 44

Scheme-2018**Scheme of Teaching and Examination
I Semester M. Tech (CSE)**

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
18PCSEC100	Advanced database management systems	4-0-0	4	50	100	3	-	-
18PCSEC101	Advanced Algorithms	4-0-0	4	50	100	3	-	-
18PCSEE1XX	Elective-I	3-0-2	4	50	100	3	-	-
18PCSEE1XX	Elective-II	3-0-2	4	50	100	3	-	-
18PCSEE1XX	Elective-III	3-0-2	4	50	100	3	-	-
18PCSEL102	Algorithms and Database Laboratory ***	0-0-3	2	50	-	-	50	3
18PCSEL103	Seminar – I **	0-0-3	1	100	-	-	-	-
Total		17-0-12	23	400	500	-	50	3

Scheme of Teaching and Examination
II Semester M. Tech (CSE)

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
18PCSEC200	Advanced Computer Networks	4-0-0	4	50	100	3	-	-
18PCSEC201	Advanced Operating Systems	4-0-0	4	50	100	3	-	-
18PCSEE2XX	Elective – IV	3-0-2	4	50	100	3	-	-
18PCSEE2XX	Elective – V	3-0-2	4	50	100	3	-	-
18PCSEE2XX	Elective –VI	3-0-2	4	50	100	3	-	-
18PCSEL202	Operating System and Networks Laboratory ***	0-0-3	2	50	-	-	50	3
18PCSEL203	Seminar – II **	0-0-3	1	100	-	-	-	-
Total		17-0-12	23	400	500	-	50	3

List of Electives

I Semester		II Semester	
18PCSEE125	Research Methodologies & IPR	18PCSEE225	High Performance Computing
18PCSEE126	Distributed Systems	18PCSEE226	Data Science
18PCSEE127	Programming Paradigm	18PCSEE227	Machine Learning
18PCSEE128	Cloud Computing	18PCSEE228	Wireless Networks & Mobile Computing
18PCSEE129	Information and Network Security	18PCSEE229	Soft Computing
18PCSEE130	Image Processing, Analysis and Machine Vision	18PCSEE230	Computer Vision
18PCSEE131	Computer Graphics	18PCSEE231	Internet of Things

Scheme of Teaching and Examination
III Semester M.Tech. (CSE)

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
18PCSEC300	Advanced Computer Architecture	4-0-0	4	50	100	3	-	-
18PCSEE3XX	Elective – VII	3-0-2	4	50	100	3	-	-
18PCSEL301 / 18PCSEE3XX	Internship in Industry or R & D Organisation / Elective VIII	** Min. 4 weeks during vacation after 2 nd Sem / 3-0-0	3	50 / 50	- / 100	- / 3	50 / -	3 / -
18PCSEL302	Project Work Phase – I***	0-0-15	9	50	-	-	50	3
Total		8/11-0-17	20	200	200 / 300	-	100 / 50	3

Electives III	
18PCSEE325	Pattern Recognition
18PCSEE326	Software Engineering
18PCSEE327	Game Theory
18PCSEE328	Web Technology
18PCSEE329	Natural Language Processing and Text Mining

Scheme of Teaching and Examination
IV Semester M.Tech. (CSE)

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max. Marks	*Max. Marks	Duration in hours	Max. Marks	Duration in hours
18PCSEL400	Project Work Phase – II*	0-0-20	22	100	-	-	100	3
Total		0-0-20	22	100	-	-	100	3

Scheme 2016**Scheme of Teaching and Examination
I Semester M. Tech (CSE)**

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max Marks	Max Marks	Duration in hours	Max Marks	Duration in hours
16PCSEC100	Advanced Operating Systems	4-0-0	4	50	100	3	-	-
16PCSEC101	Advanced Computer Architecture	4-0-0	4	50	100	3	-	-
16PCSEC102	Advanced Data Base Management Systems	4-0-0	4	50	100	3	-	-
16PCSEE1**	Elective-I	4-0-0	4	50	100	3	-	-
16PCSEE1**	Elective-II	4-0-0	4	50	100	3	-	-
16PCSEE1**	Elective-III	4-0-0	4	50	100	3	-	-
Total			24	300	600	-	-	-

Electives:

Electives I		Electives II		Electives III	
16PCSEE125	Programming Paradigm	16PCSEE128	Cloud Computing	16PCSEE132	Advances in Digital Image Processing
16PCSEE126	Language Processors	16PCSEE129	Web Technology	16PCSEE133	Pattern Recognition
16PCSEE127	Game Theory	16PCSEE130	CAD for VLSI	16PCSEE134	Linear Algebra and Random Processes
		16PCSEE131	Information and Network Security	16PCSEE135	Natural Language Processing and Text Mining

Scheme of Teaching and Examination
II Semester M. Tech (CSE)

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	IA	Theory (SEE)		Practical (SEE)	
				Max Marks	Max Marks	Duration in hours	Max Marks	Duration in hours
16PCSEC200	Advances in Computer Networks	4-0-0	4	50	100	-	3	-
16PCSEC201	Distributed Systems	4-0-0	4	50	100	-	3	-
16PCSEC202	Advanced Algorithms	4-0-0	4	50	100	-	3	-
16PCSEE2**	Elective-IV	4-0-0	4	50	100	-	3	-
16PCSEE2**	Elective-V	4-0-0	4	50	100	-	3	-
16PCSEE2**	Elective-VI	4-0-0	4	50	100	-	3	-
Total			24	300	600	-	-	-

Electives IV		Electives V		Electives VI	
16PCSEE225	High Performance Computing	16PCSEE228	Computer Vision	16PCSEE232	Machine Learning
16PCSEE226	Computer Graphics	16PCSEE229	Data Science	16PCSEE233	Fault Tolerant Computing
16PCSEE227	Software Engineering	16PCSEE230	Cyber Security	16PCSEE234	Soft Computing
		16PCSEE231	Wireless Networks and Mobile Computing	16PCSEE235	Internet of Things

Scheme of Teaching and Examination
III Semester M. Tech (CSE)

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max Marks	Max Marks	Duration in hours	Max Marks	Duration in hours
16PCSEL300	Internship/Research Assistant	-	14	100	-	-	100	3
16PCSEL301	Project Phase-I *	-	10	100	-	-	-	-
16PCSEL302	Seminar **	-	2	50	-	-	-	-
TOTAL		26	250	-	-	100	-	

Scheme of Teaching and Examination
IV Semester M. Tech (CSE)

Course Code	Course Title	Teaching		Examination				
		L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
				Max Marks	Max Marks	Duration in hours	Max Marks	Duration in hours
16PCSEL400	Project Phase -II	16 weeks	26	100	-	-	100	3
Total			26	100	-	-	100	-

