

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	--

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

